

# MANUFACTURERS' RECORD

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BALTIMORE, MAY 5, 1910.

### ADVERTISING ALABAMA.

Alabama is being given notable advertisement in a fact connected with the building of a street-railway line connecting Birmingham with Corey, the new industrial town being built from the ground up to meet the demands of expanding activities at Ensley. A few days ago 500 tons of 80-pound steel rails were laid down on the right of way of the road. These rails had, within a few days after the order was given, been run through the mills of the Tennessee Coal, Iron & Railroad Co. and delivered. The line is expected to be completed by the first of June. The striking fact about it is that its rails will lie within 20 or 30 minutes' walk of the sources of the materials from which they were made, the ore, the coke used in turning the ore into pig-iron and the limestone used as flux. The proximity of raw materials for the production of steel is the elemental influence in the growth that the district has already attained and the sure factor for its greater development.

### RECLAIMING WET LANDS.

The story in this issue of the reclamation work now in progress in Eastern Carolina shows how rapidly there is spreading throughout the land a recognition of the importance of reclaiming for man's uses the millions of acres of hitherto idle land, in some cases known as swamp lands and in some as wet or overflowed lands. In Eastern Carolina there has been remarkable development in the trucking interest, and an increasing demand for trucking land has justified local people in undertak-

ing the reclamation of some thousands of acres of land from which the timber has been taken, but which is too wet to be available for cultivation without drainage.

Impetus to this movement for reclamation in the eastern part of the South will be given by the work in the Everglades region of Florida involving the cutting of 235 miles of canals. Though that plan will benefit individual interests, it is to be carried out under the auspices of the State Government as affecting the interests of the State. In South Carolina it is announced a Chicago capitalist has purchased 20,700 acres of wet lands, the greater part wooded and estimated as capable of yielding 150,000,000 feet of marketable pine timber. The timber is to be cleared away and the lands are to be drained and turned into truck farms. So at many points the capitalist and the engineer are gradually reducing the 50,000,000 acreage of wet lands in the South and bringing them into condition for the most productive kind of farming.

### PESSIMISTS, TO THE REAR!

The editorial review of the cotton situation in the last issue of the MANUFACTURERS' RECORD, which was written after telegraphic consultation with the best-posted authorities throughout the entire South, proves to have been correct. The damage to the cotton crop is not as serious as was indicated by the first reports published in the daily papers. The statements that it would be impossible to secure seed for replanting and that the mills were charging \$100 to \$150 per ton for seed have been proved incorrect, as we said at the time. It is always well to make due allowance for exaggerated reports that are sent out in any time of great disaster, whether it be a fire, a flood or a freeze.

It is gratifying to know that, although considerable damage was done to the growing cotton crop, it was not of such a serious character as to at all affect the material interests of the South. This section is prospering in recent years to such an extent that it could suffer a very great damage, many times worse than the recent cold snap, without any really severe injury. As a matter of fact, the loss by reason of a great shortage of cotton would not fall so much upon the South as upon the world at large. Another cotton crop of 10,000,000 bales following the present shortage in the world's supply would drive cotton to such a price as to bring to this section the largest amount of money ever received for any cotton crop. But to the world at large it would prove a great disaster, for millions of spindles would have to remain idle and hundreds of thousands of employes in cotton mills would have to work on short time. The rest of the world would be the sufferer; the South would have but little of which to complain. Notwithstanding this well-known fact, the situation is generally

presented in the papers of the country as though a short cotton crop would be a disaster to the South, whereas such reports should bemoan the fate of the world, which depends upon the South's cotton, while lamenting that a short crop compels the world to pay so big a price to this section. That would be the more logical way of looking at the situation.

A very considerable proportion of cotton is replanted every year even under normal weather conditions. The recent cold snap did some damage to cotton above ground, and in a limited area possibly to the seed planted but not at the time sprouted. There is ample time, however, to replant where the growing plant or the seed were damaged, and an ample supply of seed has been found available. It may therefore be counted that while the crop will start with some adverse conditions, and much of it will be some weeks later than had been anticipated before the cold spell, when it was then several weeks ahead of the usual average condition, there is no reason why the South should not this year be able to make a fairly good crop, and if weather conditions are favorable it is possible that it may be able to produce a large crop. It may, therefore, be safely counted that there will be no material loss to the South from the recent cold snap. The recuperative power of this section is too great to be in any way retarded by so small a thing as a few days of unfavorable weather.

The world's demands, however, are such that it needs 14,000,000 to 15,000,000 bales of cotton from the South this year, and it needs it badly. Even if the South could and should this year produce 15,000,000 bales, not a pound ought to command as low a price as 12 cents if prices were always fixed by the law of supply and demand. The shortage in the world's supply, practically the famished condition of cotton mills in this country and abroad, but especially abroad, needs 15,000,000 bales to fill up the vacuum made by the consumption of reserve stocks heretofore carried and to meet the actual needs of the world's requirements for cotton goods.

With the certainty, as certain as anything in human affairs can be, that the coming crop, whether large or small, should bring to the South the largest amount of money ever received for any cotton crop; with the general broad business development of this whole section, the very rapid development of diversified agriculture seen in every portion of the South; with the steady expansion of railroad interests, the southward trend of population and of capital, there is every reason to expect a great increase in the progress of this section during the next 12 months as compared with the last 12.

There is no room in America for a pessimist. There is no justification for the existence of such an abnormal individual; but of all portions of the United

States the South is pre-eminently the section in which, if a pessimist could be found, a committee ought to be appointed to inquire into his sanity. There may be pessimists in other sections about the South, because sometimes the wish is father to the thought, but the number of such has been decreasing so rapidly for the last 50 years that it is difficult to find one left. Let it be an accepted fact in the South that if any man is found who, by reason of temporary weather conditions, or who for any other cause shows that he has so little knowledge of the inherent strength and recuperative power of the South as to be a pessimist, that his friends will ask the Court to appoint a committee to inquire into his sanity.

### EXPANDING INDUSTRIAL OPPORTUNITIES IN THE SOUTH.

Since January 1 the MANUFACTURERS' RECORD has presented a total of 17,912 items on developments and construction work in the South. The extent and diversity of the news published regarding these operations is shown in the following condensed statistical statement:

Synopsis of Construction Department, MANUFACTURERS' RECORD, covering the months of January, February, March and April, 1910.

Total of items to May 1.....	17,912
Construction.....	14,772
Machinery, Proposals and Supplies Wanted.....	2,536
Burned, etc.....	604
January, February and March items previously detailed.....	5
April items divided in detail as follows:	
Bridges, Culverts, Viaducts.....	68
Canning and Packing Plants.....	21
Clayworking Plants.....	29
Coal Mines and Coke Ovens.....	41
Concrete and Cement Plants.....	8
Cotton Compresses and Gins.....	37
Cottonseed-oil Mills.....	26
Drainage and Irrigation Systems.....	24
Electric-light and Power Plants.....	128
Fertilizer Factories.....	12
Flour, Feed and Meal Mills.....	24
Foundry and Machine Plants.....	47
Gas and Oil Developments.....	61
Ice and Cold-storage Plants.....	47
Iron and Steel Plants.....	5
Land Developments.....	132
Lumber-manufacturing Plants.....	117
Metal-Working Plants.....	7
Mining.....	60
Miscellaneous Construction Work.....	19
Miscellaneous Enterprises.....	199
Miscellaneous Manufacturing Plants.....	235
Railway Shops, Terminals, Roundhouses, etc.....	19
Road and Street Improvements.....	205
Sewer Construction.....	93
Telephone Systems.....	64
Textile Mills.....	46
Water-works.....	149
Woodworking Plants.....	59
Railways.....	
Steam.....	243
Street.....	37
Buildings.....	
Apartment-houses.....	73
Association and Fraternal.....	56
Bank and Office.....	146
Churches.....	146
Courthouses.....	23
Twellings.....	576
Government and State.....	31
Hotels.....	81
Miscellaneous Structures.....	336
Municipal.....	43
Railway Stations.....	34
Schools.....	272
Theaters.....	35
Warehouses.....	65
Burned, etc.....	157
Machinery, Proposals and Supplies Wanted.....	630
	4759

The list of Machinery, Proposals and Supplies Wanted contains 11 foreign wants, representing the countries of Canada, Mexico, Argentine Republic, Chile, Holland, Italy, China, Turkey and Greece.

Capitalists, manufacturers, builders, engineers, dealers, farmers, mechanics and laborers are alike concerned in

these current records of building of bridges and roads; development, drainage and irrigation of lands; establishment and extension of railroad lines, and building of terminals; opening of mines; equipment of factories, of iron, lumber, textile and flour mills, and concrete and cement plants; operations of various woodworking industries; construction of electric-light and power plants; installation of ice and cold-storage machinery; establishment of and improvements to water-works and sewerage systems.

The buildings noted in these columns make demand upon the skill of the architect and designer; the contractor brings men, machinery and material to the constructive part of the work. From the excavation of the first shovelful of earth to the final touch of the decorator's art there is need and call for all that goes into the erection, furnishing and adorning of State and municipal structures; of courthouses and office buildings; of dwellings, schools, theaters and warehouses. These needs, with those of the above-mentioned industrial enterprises, have been set forth daily by our *Daily Bulletin* and weekly in the columns of the *MANUFACTURERS' RECORD*. Many enterprises and buildings have been twice or several times mentioned as further developments have progressed and new facts become known. In all these publications those who run the industrial races may read the lines most applicable to their material supply or trained skill.

As to material supplies, many such have been noted in the 630 items appearing in Machinery, Proposals and Supplies Wanted columns during April, as also in the aggregate of 2536 such items published within the four months. Every one of these is a definite request from correspondents for precise information on the subject named. That 53 of these specific requests come from readers of the *MANUFACTURERS' RECORD* in foreign countries is an indication of the interest with which its published news is greeted in other lands. The foreign countries represented include Canada, Mexico, Cuba, Argentina, Uruguay, Guatemala, Porto Rico, Australia, Chile, Holland, Austria, Hungary, France, England, Italy, China, Turkey, India and Greece.

At first view the 604 notices of burned and storm-wrecked buildings and plants would seem rather of the destructive than of the conservative order. But, with few exceptions, they mean re-erection of buildings and replacement of machinery or repairs to damaged. With such facts in view these items also are noted pending accurate information as to plans for rebuilding, equipment, etc.

These statements strikingly illustrate the South's enterprise and expanding industrial opportunities.

#### UNITED FOR CITY GROWTH.

Upon several occasions recently the *MANUFACTURERS' RECORD* has been moved to cite Oklahoma City as an illustration of what communities may accomplish by giving evidence to the world that they are alive and are anxious to attract live men. Oklahoma City naturally has the advantage of being a center in a new State full of possibilities which active men from all parts of the country are eager to discover. In this issue we publish a letter from Gadsden, in one of the oldest States of the country, Alabama, telling of the success of a bonus of \$150,000 offered for the establishment of a steel-working plant there. The offer was

made through the Business Men's Club. There lies the secret—the union of forces by alert, aggressive men for the advancement of the interests of the whole community. It is the sure promise of success wherever the city may be situated and whether the city is 50 years old or five years old. The explanation of Oklahoma City's progress is offered in its possession of a Chamber of Commerce with 1200 members, each paying \$2.50 a month and standing in solid phalanx behind an able leader for everything that is likely to advance the city's materialities. That is a fine sum of money—\$36,000—available every year for developmental measures. It exemplifies the spirit of the business men of Oklahoma City. But a large sum of money is of comparatively little use unless it be spent in the right way at the right time. Results show that Oklahoma City and its Chamber of Commerce have the proper combination.

#### NEW RAILROAD COMPANIES IN THE SOUTH.

Need for more railroads in the South is well expressed in the fact that during the four months which have passed since January 1 there have been incorporated or organized in this section of our country 76 new railway corporations, which propose to construct altogether 5214 miles of line. Including Missouri and Oklahoma, the total number of new companies is 90 and their total projected length 7330 miles. None of these figures includes street railways, although electric interurban lines have been taken account of, besides others which intend to use gasoline motive power. All are entirely new enterprises, none chartered or formed previous to the period under consideration being enumerated.

This disposition to increase the railroad mileage of the Southern and Southwestern States is a most gratifyingly characteristic of their people, who realize that more lines are imperatively needed to develop natural resources, to encourage agriculture and other industries, and to facilitate and extend commerce. Florida is the only State which since the beginning of the present year has not seen the formation or charter of some new railroad enterprise, but considerable railroad construction is in progress within her borders and some important extensions are also being made. Texas shows the largest number of new companies, and Kentucky and Missouri each the least. The following table exhibits compactly what is being done:

States.	Number of new companies.	Total mileage.
Alabama.....	3	85
Arkansas.....	7	245
District of Columbia.....	1	10
Georgia.....	7	648
Kentucky.....	1	55
Louisiana.....	3	190
Maryland.....	5	217
Mississippi.....	3	490
Missouri.....	1	30
North Carolina.....	7	315
Oklahoma.....	13	1986
South Carolina.....	5	314
Tennessee.....	2	25
Texas.....	17	2245
Virginia.....	3	95
West Virginia.....	12	470
Totals.....	90	7330

In Texas and Oklahoma, where it might be expected that much new railroad would be built, because large sections of these States are still undeveloped and quite new country, the amount of work projected is nevertheless astonishing. In Texas there are three large plans—one of 478 miles from the northern to the Southern part of the State, another of 300 miles running from the southeast to the northward,

and still another which proposes the building of nearly 500 miles. Four other schemes call for the construction of more than 100 miles each, besides smaller propositions. In Oklahoma there is one organization which plans to build 500 miles, four others with an average of more than 200 miles each, besides four more with over 100 miles each to construct. In the other States the mileage proposed is mostly broken into small lines of from 25 to 50-mile lengths. Thus West Virginia, with 12 new roads planned, has only one of as much as 100 miles.

Considerable of this proposed mileage will be under construction this summer, yet it will be only part of a great amount of new railroad work that is under way or decided upon for the extension or the betterment, as the case may be, of existing roads. Thus in Texas the Santa Fe system is pushing its extensive construction of new lines in the western part of the State, which, when finished, will add several hundreds of miles to its tracks and will be the first big construction done through the Llano Estacado region. The contractors are rapidly pushing it. The Wichita Falls Route is also doing considerable new work in both Texas and Oklahoma. The Kansas City, Mexico & Orient has a line building from San Angelo to Del Rio, Tex., 170 miles, this being in addition to its main-line construction, which is steadily progressing. The Texas Central has one extension under way and contemplates starting another soon. The Frisco also has a new branch under way from Brady to Menardville, which may be extended farther. Construction has begun on the Galveston-Houston Electric Railway, which has been under discussion for several years, and it is expected to be completed by the end of December next. At Aransas Pass the work of building a terminal railroad and deep-water harbor is begun. The Stephenville North & South Texas Railway is to be extended in both directions, the Missouri, Kansas & Texas (a Hawley system) having purchased it. The Rock Island will rebuild its line between St. Louis and Kansas City to make it a very substantial, high-grade road, and it will also do a large quantity of betterment work in Arkansas. In the last-named State the Memphis, Paris & Gulf Railway Co. will start its extension plans, building first eastward toward Memphis, Tenn., the southwestern extension to Dallas, Tex., to be taken up later. An entirely new enterprise is also proposed for a railroad from St. Louis to Fort Smith.

In the eastern part of the South the Chesapeake & Ohio, the Norfolk & Western, the Louisville & Nashville and the Western Maryland all have recently started important work. The C. & O. is double-tracking, besides building some extensions in the coal fields; the N. & W. has extensive double-track and tunnel work in progress; the L. & N. is reaching out into new Kentucky coal territory by means of the Wasiota & Black Mountain Railway, which has more than 50 miles of extension under contract, and the W. M. has just awarded contract to build its extension over 80 miles to connect with the New York Central system. The Winston-Salem Southbound Railway, a joint enterprise of the Atlantic Coast Line and the Norfolk & Western Railway, has completed so much of its grading that tracklaying is about to begin, and the 90-mile connecting line will probably be in operation by next autumn. An extension of

100 miles is to be built by the Florida Railway, giving it a line from Live Oak, Fla., to Jacksonville and Fernandina. In South Carolina, probably extending into North Carolina, a big interurban line is to be constructed, J. B. and B. N. Duke of tobacco fame being prominent in the enterprise. Much other railroad work, including the Southern's betterments on its Atlanta line, is also going on, but to specify more than the recent things would require too much space.

Considering the situation as it now appears, there will be a large amount of railroad construction accomplished this year in the South. Between the panic and 1910 it was dull, but conditions at present promise a liberal addition to the total mileage of Southern railroads before the advent of another year.

#### THE NEW YORK SUN ON THE SOUTHERN "CHILD-LABOR" AGITATION.

In an editorial dealing with the question of child labor in Southern cotton mills the New York *Sun* places itself in a path that it could follow to the end to the profit of the country. It says:

Some time ago, perhaps three weeks, we took occasion to say that the women and children taken from the smaller Southern farms and employed in the cotton mills were vastly benefited by the transplantation; improved physically and morally, transformed from forlorn and anemic conditions into conditions of health and activity and vigor, and elevated to higher planes of enlightened well-being. Of course we did not refer to the exceptional mills where searchers after hardship and neglect can find almost any deplorable circumstance they happen to be looking for. We had in view the normal mill towns, representing six-tenths if not more of the now progressive industry.

There are mills all over North and South Carolina where so-called "child labor" has been most beneficent, where the mill owners build schools and churches, and for the most part pay the salaries of the teachers and the ministers, where they establish clubhouses and libraries and kindergartens for the training and development of the youth within their influence, and where the objects of these ministrations emerge from the pallid and unwholesome products of the isolated farms into rosy, happy and perfectly natural children. Some have established hands and military companies, playgrounds, halls for light theatrical entertainments, and behind it all are the sanitary homes, the cooking-schools, the system of picnics and other social reunions which illumine life and bring health and knowledge and high spirits to the individual.

It is very easy for muckrakers, and, indeed, for honest but misguided reformers inspired by hired agents, to find here and there a mill where inferior conditions do actually prevail. They can photograph mills brilliantly lighted up to prove that they run all night, and show little hands that have lost a finger to prove that the relentless myrmidons of Mammon are grinding innocent children into the dust; but the testimony from an overwhelming majority of the Southern mills is to the contrary, and from most of the manufacturing towns and villages of the South we hear a very different story. From Pelzer, S. C., and from Greenville in the same State; from Charlotte, N. C.; from Alabama City, from far and wide, with the testimony of the Young Women's Christian Association and other organized workers for uplift to sustain and illustrate the burden of the proof, we have a tale of rescue and exaltation that ought to fill every doubting heart.

We can hardly imagine that any sincere worker for the toiling classes would wish or, unless grossly misinformed, attempt to destroy or even minimize this perfectly complete and easily accessible evidence; and in that light of the matter we respectfully dodge the esteemed *Survey* and other ignorant Northern oracles and fall back upon more or less useful testimony.

The deliberate drive of the past 10 years against the cotton mills of the South under the pretense of philanthropy is one of the most shameful episodes of the twentieth century. It originated in the shortsighted, narrow-



mindful view that this country is so small in area and so limited in manhood power that industries cannot flourish in one section except at the expense of like industries in other sections. Under the inspiration of that conviction an attempt was made to obtain national legislation interfering with the rights of individual citizens and calculated to hamper especially the operation of Southern cotton mills. As an aid to this attempt was enlisted organized labor, and as incident thereto Southern textile centers were visited by secret agents of organized labor introduced as simon-pure philanthropists and by spies in the employ of an official of at least one New England State.

Both agencies concealed their real intent—the crippling of the labor supply of Southern mills—under the guise of promoting the well-being of women and children and the social health of the country. Failure to incite to strikes for higher wages the employes of the mills or to infuse them with the spirit of radical socialism was quickly followed by a plea to the public having just enough truth about it to disarm suspicion of its essential falsehood. Given an emotional turn, appealing to the best instincts of women without opportunity to inform themselves as to facts, and to a few males here and there whose atmosphere had led them into the habit of using their midriffs as a vehicle for what they thought was thinking, this propaganda soon produced its horde of hireling agitators, unheard of previously as being particularly interested in the welfare of humanity, and fitting in with "benevolences" designed to confuse the public mind about fundamental questions that had to be settled right if the country was to maintain its integrity.

The lying, deliberate or unconscious, of the hirelings was reinforced by magicians, lecturers and space-fillers for Sunday newspapers; organization central in New York city and financed there was effected; at least one Senator of the United States living and moving and having his being in hysterics and histrionics was loaded with misinformation, and provision was made for the expenditure of \$200,000 or \$300,000 of the people's money under the auspices of sociology.

All the while the managements of Southern cotton mills were carrying on to the best of their ability the policy which had been recognized as the proper one for 50 years and more, and following in the right direction, if, perhaps, imperfectly, the instincts of men employing others of their own race stock. Their attitude is well epitomized in the editorial of the New York Sun. Now, let the Sun follow the agitation to its feeding springs, tell the country what those springs are, and in so doing uncover the so-called philanthropies, the immigration schemes, under various guises, and other movements directed against the real welfare of the South with which New York city seems to reek.

#### CLASS LEGISLATION BY ORGANIZATION.

Furtherance of co-operation between the railroads and the farmers was the aim of the address at St. Louis this week by Chairman B. F. Yoakum of the St. Louis & San Francisco Railroad Co. before the National Farmers' Union. Mr. Yoakum has on many occasions recently shown a practical interest in the welfare of farmers whose operations result in so much business for the railroads, and in his speech he demon-

strated the beneficial results following co-operation between the man who produced and the man who transports. He argued for an understanding between railroads and farmers for the elimination of politicians who had used both in the past, and he commended the spirit that finds expression in organization.

It may be suggested that the meeting of the National Farmers' Union was a splendid opportunity for an exposition of the dangers in organization taking the form of political action upon a class basis. Only recently the MANUFACTURERS' RECORD combatted the suggestion that the corporations of the country should organize a political party. For the same reasons then advanced we would warn the National Farmers' Union and like organizations against permitting their forces to be used in bringing political pressure to bear for the advancement of special interests. That inclination has already appeared in executive acts of the National Farmers' Union, and in it is the unfortunate possibility that many of the excellent practical results that the Union may accomplish through organization may be vitiated by giving its actions a political turn. Some of the greatest politicians in the country are men who never are prominent in political party affairs, but who in vociferous non-partisanship representative of or appealing to class interests are playing the biggest kind and the most dangerous kind of politics. The call of the country is for less of class in politics and more of character recognizing the good in practically all classes.

#### A BLIND GUIDE.

In a gloss of the attempt to obtain national incorporation of the Rockefeller Foundation the *World's Work* in its current issue says:

A national charter, practically identical with the charter now asked for, was granted by Congress to the General Education Board, to which Mr. Rockefeller has given \$53,000,000. The only difference between them is that the charter now asked for permits a wider range of philanthropic activities than the General Education Board has. Although the charter of the General Education Board provoked no criticism, the request for this new charter has called forth most extraordinary eccentricities of opposition.

The editor of the *World's Work* has been a member of the General Education Board from its beginning. His statement that the charter of the General Education Board provoked no criticism leaves to charitably minded observers but one of two conclusions—either that he has not kept in touch with current events of the past eight or nine years as a mold of public opinion should do, or that he has not been admitted into the sanctum sanctorum of the General Education Board.

If any national charter has provoked during the past eight years more criticism than the charter of the General Education Board, we have failed to observe it. It may be true that the actual text of the charter has not been criticized, and that, when it was cleverly passed through Congress, it excited no special comment at the time. But the acts of the General Education Board and its policy revealed in those acts and in the circumlocution of its representatives have been persistently and vigorously criticised in many quarters. That very criticism is responsible for the fact of the strong and widespread opposition to the Rockefeller Foundation, which is essentially nothing but a step forward in the scheme of which the General Education Board is a part.

## SWAMP LANDS CHANGED INTO FERTILE FARMS.

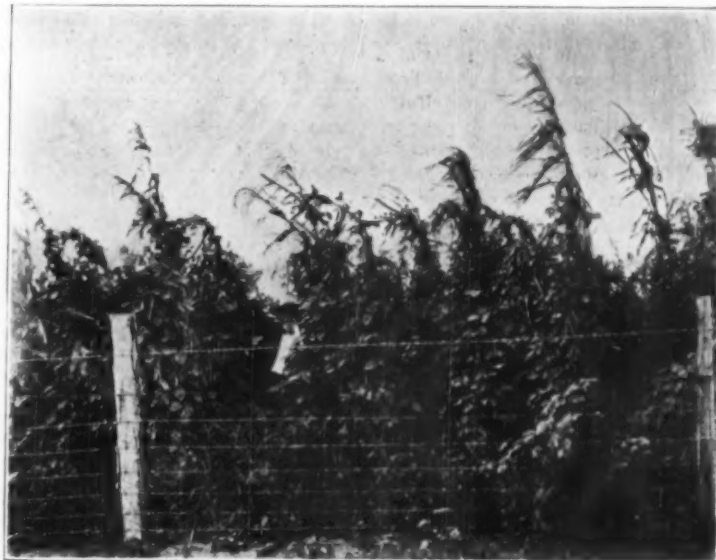
What Individual Drainage Operations Have Done for Eastern North Carolina.

[Special Correspondence Manufacturers' Record.]

Belhaven, N. C., April 30.

In this region of enthusiastic industry and enterprise the things which are being done would almost awaken the Seven Sleepers of ancient times and make the dumb speak. Upon every hand is seen the result of human activity, and the spirit of progress is dominant. Twelve years ago

point for the products of its lands and its mills. The construction of this line, which was at first only a private enterprise, although now a common carrier, and part of the enterprising Norfolk & Southern system, resulted in the establishment of several mills at Belhaven, one of which belongs to the Roper Lumber Co., another



CORN AND PEAS, AFTER 200-BUSHEL CROP OF POTATOES IN SAME YEAR.

there was nothing at the point where this busy little city is situated save three families. Now there is a bustling community with a population estimated locally at from 3000 to 4000 individuals, electric lights, a good artesian water supply with flowing wells on the streets, an excellent railroad and several prosperous industries.

to the Wilkinson Bros. and the third to the Interstate Cooperage Co., the latter a Standard Oil plant for the making of casings to protect oil cans in shipment.

Although these mills require great quantities of timber from the neighboring woodlands, and lumbering is consequently the chief industry throughout this region, it is



COTTON FIELD, WITH MR. S. W. WILKINSON, WHO IS 6 FEET 2 INCHES TALL.

The hotel is filled to overflowing practically every night, unexpected guests being quartered at nearby homes, and the spirit of the town spreads into the surrounding country, stimulating it to industry and progress.

All this has come about through the John L. Roper Lumber Co.'s railway, built from Mackey's Ferry down amid primeval forests 30 miles to the place on Pungo River where Belhaven now stands, in order to obtain another water shipping

not the gathering of forest products which especially distinguishes the country round about, but the wonderful drainage work that has been accomplished by John A. Wilkinson and Samuel W. Wilkinson, and is being further extended by them. Another brother associated with the work is J. E. Wilkinson.

The Wilkinson home place is at Wilkinson Station, on the Pinetown cut-off of the Norfolk & Southern Railway, which provides a short route between Belhaven and

Washington, N. C., which latter is on the main line. Sam Wilkinson lives on the place, where he and his brothers were born and reared, the farm then being only 50 acres in extent. His brother, John A., resides in a fine new home at Belhaven. The brothers now own about 25,000 acres of land, which they added by degrees to the original tract within the last 10 years, most of it being swampy and hitherto considered valueless, excepting for the timber growing thereon. Although they possessed a farm, they were also lumbermen, and after cutting out considerable timber several years ago decided to drain upon a large scale the land thus cleared and bring it under cultivation. They believed in the soil, and this faith has been amply sus-

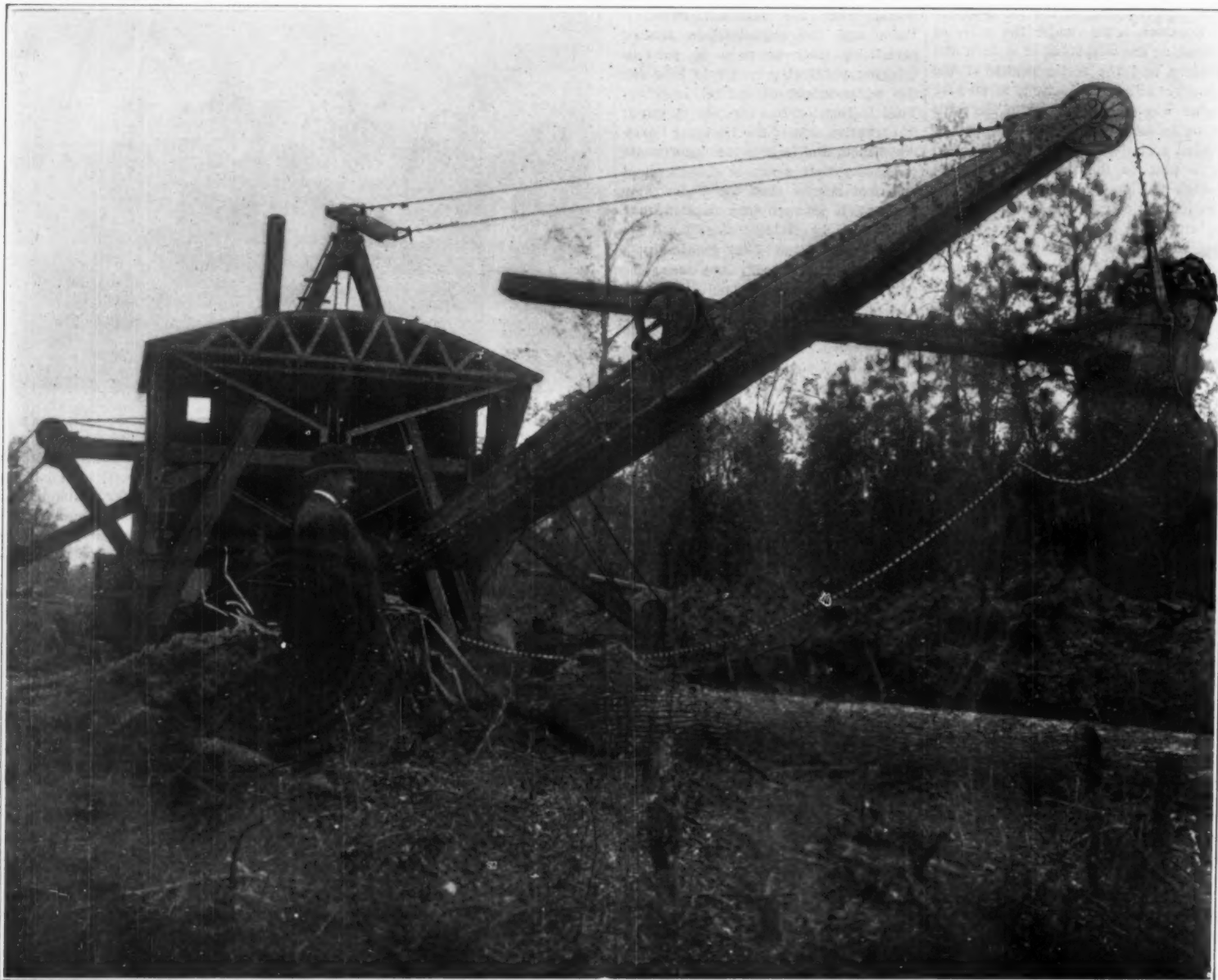
lishment of a State drainage association, of which John A. Wilkinson is president, and the enactment of a drainage law which provides for the reclamation of lands anywhere in North Carolina as may be desired by a majority of the owners thereof. The Messrs. Wilkinson, natives of the old North State, as they are, have (in addition to increasing the value of their lands, and that, too, with a profit on their labors) the keen satisfaction of knowing they were the intelligent and courageous pioneers in a great work which will be of extensive and lasting benefit to the Commonwealth and their fellow-citizens, besides opening up to settlement vast tracts in which bear, deer and other wild animals now roam, and where the timber and un-

not much colder than that of Florida, the mean annual temperature being from 60 to 65 degrees, the same as that of South Carolina and the middle counties of Georgia, Alabama and Mississippi. This is because of the proximity of the land to the sea, which latter in the latitude of North Carolina is much tempered by the warming influence of the Gulf Stream. Indeed, the general appearance of the country is not unlike Florida. Occasionally the long, streaming gray moss peculiar to the latter State is seen upon the trees, and the swampy, tangled woods suggest the subtropical region.

It was about three years ago that the Wilkinson brothers began their extensive drainage work, which was to place them so

that the land was susceptible of drainage. Only one mile had been cut when it became necessary to build a six-foot dam to retain enough water in the canal to float the dredge. Within another mile or so another dam had to be erected, and after five miles were cut the total drop of the water in that distance was discovered to be 12 feet, an average of more than two feet per mile.

Since then many other canals and lateral ditches have been cut, the former carrying the water out into the Pungo River. Other dredges were built to continue this work, two of them being constructed in the woods at Wilkinson Station, from which point they dug their way out into the river. They were set to work



AHEAD OF DREDGE CUTTING A CANAL.

tained by the outcome of their labor and enterprise. They have built 25 miles of canals from 20 to 30 feet wide, most of them being 25 feet, and from six to eight feet deep. From these canals at intervals of 400 yards are dug drainage ditches across the cleared land, and the water follows them out into the canals and thence into the river.

While the amount of land which the Wilkinsons have cleared and cultivated (2000 acres) is small as compared with their total holdings, their drainage system has made available extensive tracts. It has proved beyond doubt the practicality of draining the territory that was deemed impossible by not a few individuals who witnessed the beginning of the work, but this has been followed by the estab-

dergrowth are so thick that it is practically impossible for human beings to make their way through them without first using the axe and the knife to cut openings, and then in the undrained sections one must splash along in water.

The farm lands provided by the cutting and marketing of timber and the draining and clearing of the soil are among the richest in the United States. The soil is a black sandy loam, generally from four to seven feet deep, but sometimes it is 10 feet. Then even after it is drained the water underlying it makes it practically proof against drought, and only an exceptionally long dry spell will show its effects upon growing crops. Moreover, it is easily possible to raise two crops a year upon the land, owing to the mild climate, which is

prominently before the people of their State and was also to result in giving the country at large another practical demonstration of what breadth of vision, energy and enterprise existed among native Southerners. They had developed some land in a small way for several years, but now they obtained a large steam dredge and began cutting a canal 30 feet wide and eight feet deep. The excavated earth was made into a road on one side of the canal, and this plan of building a canal and laying the foundation for a roadway at the same time was followed in all the rest of their dredging work, so that both roads and canals side by side now traverse what were until recently wastes untrod by the foot of man. In making this first canal ample evidence was soon found to prove

on the surface of the ground right where built, and as a canal was cut it filled with water from the saturated soil and then the dredges floated in it, after which it was easy for them to cut and cut and advance, with plenty of water to swim in. The digging of the canal reveals beneath the soil extensive marl beds, the shells of which turned out upon the parallel roads made by the dredges will aid in providing superior highways. Occasionally whole oysters are excavated, indicating that in past ages the entire region was submerged by the waters of Pamlico Sound, yet now the land lies 18 feet above its level.

One of the most interesting parts of the land reclamation work is its preparation for farming. This work begins immediately after the marketable timber is cut



and taken out. Then the ground is left covered with stumps, besides numerous small trees and underbrush, together with some occasional large timber not fit for lumber manufacture and not worth the cost of removal. All this material, which, if it could be profitably gathered and marketed, would supply a good-sized town with kindling wood for a long time, is then burned just as it lies, destroying weeds and other obnoxious growths, after which corn is planted by a primitive method, that of poking holes in the rich soil with a stick and dropping in the seed. This is the first year's crop, and it has yielded 50 bushels of corn per acre, the stalks grow-

cotton two bales per acre. As many as 165 barrels of potatoes (two and one-half bushels to the barrel), or a total of 400 bushels, have been raised on one acre of this rich deep soil. At least 75 barrels, or from 175 to 190 bushels per acre, can be expected, it is said. There may also be grown from 1500 to 2000 pounds of seed cotton per acre. The cotton stalks are often eight feet high, and the cornstalks are so tall and strong that a full-grown raccoon has been seen to climb them and cling thereto while comfortably dining upon choice roasting ears.

A singular thing about this rich farming country is that little hay is grown by the

cypress trees, which were to be felled later and sent to the shingle mills. Along one side of the tract extended a large drainage canal, and at regular intervals drainage ditches divided the land gradually, taking from it the surplus water it contained and thus making it fit for cultivation. All over the ground for the entire two square miles lay brush and small trees, with here and there a larger trunk, some times a foot or more in diameter, but of a character which it would not pay to take to the sawmills. All this was to be burned over after the standing cypress had been gathered, and then corn was to be planted on the whole clearing, or between 1250 and 1300 acres.

of water, as from a faucet, followed the wood and trickled down into the stream flowing along the bottom of the drain. It was thus easy to understand why flowing wells existed on the streets of Belhaven, and why practically all of the houses there do not have cellars, but are mounted on brick piers. John A. Wilkinson's home is thus something unique in the town, because it has a cellar, although situated immediately beside the Pungo River.

The trip to the clearing, where we saw how the big canals and ditches are made and also how the roads are constructed along one bank of the canals, was made on a flat logging car, upon which chairs



PUMPING WATER OVER DAM TO FLOAT DREDGE.

ing up amid the stumps and fallen timber promiscuously, and more or less irregularly, but strong and flourishing. The next year, it being still impossible to use the plow on account of the remaining stumps, recourse is again had to the stick-and-hand method of planting, but by the time a third year's crop is to be put in, plowing can be done and the ordinary farm machinery used, because the stumps have decayed and no longer constitute obstacles to cultivation.

When the land is thus finally converted into farms it is found advisable to use fertilizers upon it, because so much greater yields can then be obtained than if it is

farmers. Some of them raise none at all, but buy it from distant points, paying for it from \$1.25 to \$1.50 a hundred pounds. The Wilkinsons raise some hay, but most of the farmers devote their attention to cotton, and the cultivating of other farm supplies is also neglected for the one crop that is peculiarly Southern. This experienced agriculturists condemn, arguing that the farmers should supply the home demand for agricultural products first of all, looking to other markets only after local needs are supplied. The neglect of hay-growing for cotton is only one instance of the indifference of Eastern North Carolina farmers to meeting local requirements,



BEHIND THE DREDGE AT WORK.

S. W. Wilkinson, who is the farmer of the triumvirate, said that the methods they pursued resulted in the crops paying for the work done upon the land to redeem it, the balance at the end of five years showing a profit, in addition to greatly increasing the value of the land.

One of the ditches crossing this tract displayed the black, rich soil to a depth of about four feet to the bottom of the trench, whose straight and vertical sides exhibited no signs of breaking or caving. Indeed, he said that they would not break down, although where they were cut through a more sandy region there was some caving and the ditches were cut more on a slant

were placed, this vehicle being pushed by a small locomotive used in lumbering and of the type employed by contractors. It was at Wilkinson Station that the journey upon the car began, after an eight-mile ride in an automobile from Belhaven. Proceeding for a short distance along the cut-off toward Pinetown, the train stopped, and the fireman, who also acted as conductor, opened a switch to a branch leading off across the farm lands. The engine pushed us in, he closed the switch behind us, and, leaping aboard, jangled the bell as we rambled along over the logging railroad, which was reasonably straight and substantial, with stout rails and hewn ties



CANAL COMPLETED THROUGH CLEARED LAND.

not employed. Then, too, it is ready for the growth of at least two crops a year. For instance, large quantities of vegetables may be grown, gathered and shipped in the early spring, and then in May corn or cotton can be put in. Yet it is also possible to obtain three crops in one year. Thus a crop of 200 bushels of potatoes per acre has been gathered by the Wilkinsons from one field, after which corn and peas were grown together on the same land, the peas being sown between the corn rows. Corn has yielded 100 bushels per acre and

and of the disposition of Southern agriculturists generally to reject profitable advice that they diversify their crops.

In company with S. W. and J. E. Wilkinson I made a trip through much of the drained region and saw considerable of it that was cleared and cultivated. One tract which was in process of conversion from desolate swamp to cheerful, smiling farm was particularly interesting. It was two miles long and one mile wide. The timber fit for manufacture into lumber had all been gathered, excepting some scattered



CANAL COMPLETED THROUGH THE FOREST.

to prevent breaking. In the black soil small roots were plentiful from the growth which had covered the swamp, and seemed to act as a natural binder to sustain the sides of the ditch, although Mr. Wilkinson explained that even where roots did not exist the loam would not cave. To show how the water underlaid the ground in those reclaimed tracts, rendering them safe from the effects of long dry weather he pushed a stick into the side of a ditch several inches above the bottom, and when he withdrew it a stream

near the main railroad, but which gradually declined in quality until it became a veritable tram line with rails spiked on round sticks of wood, the steel weighing hardly more than 20 pounds per yard. As the engine and car advanced the straightness of the track disappeared, and it also became uneven. Corkscrew-like it wriggled into the wooded swamp with the rails on one side sometimes much higher than those on the other, and with the rude ties sagging in the slough as the wheels slowly rolled over them into the depths of the

forest, where it was possible to see the swampy region at its worst and to fully comprehend the problem which presented itself to the Messrs. Wilkinson when they began the experiment of drainage. At first, after leaving the cultivated lands, no water was visible upon the surface, but as the train proceeded the ground became damp, then wet, with small puddles here and there, and finally all wet, excepting immediately around the bases of the larger trees, where their roots had lifted small sections of the soil out of the morass. The undergrowth was thick, and so tangled that it seemed impenetrable.

After entering upon one branch and then another, all the time turning to the left, the small train and its burden of half a dozen passengers besides the engineer and fireman came upon a piece of track that reminded one of the tortuous outlines of a grapevine. Somewhere at the end of this in the depths of the forest was a skidding machine, or "skidder," as the lumbermen called it, which is used to pull logs out of the woods up to the track, where they may be loaded upon flat cars and taken out. By and by, after the engine and car had puffed and creaked along slowly for some time, the position of the skidder was revealed by clouds of steam and the voices of the loggers became audible. Then around an abrupt curve the odd machine came into view as it tugged away at a heavy log some distance off to one side of the track. A wire rope more than 100 yards long and with a hook at its free end was hitched about the log and the drum on the skidder was winding up the stout cord while the heavy piece of timber came smashing through the undergrowth, mowing down brush and breaking and crushing the saplings. It caught once or twice, but the loggers speedily detached it and it soon dangled from the end of a crane over a pile of similar timber beside the rails, and was then dropped upon the heap. There is something thrilling about seeing one of these big logs pulled by the rope come tumbling through the bushes and small timber as lightly almost as if it were a toothpick and be dropped carelessly upon the big woodpile. Of course, the strain upon the skidder is tremendous, and it is guyed and anchored firmly, besides having legs which reach to the ground on either side of the car that conveys it wherever its services are required. Its strength lies in a steam engine supplied by a vertical boiler.

From the woods by means of the tramroad the logs are gotten out and sent to the mills at Belhaven, where with band saws and other improved machinery working in harmony they are speedily cut up into lumber for building and other purposes, including the manufacture of blocks for street paving, the black gum wood being found suitable for the latter purpose. The Roper mill at Belhaven has a monthly capacity of from 2,000,000 to 2,500,000 feet of lumber; the Wilkinson mill is smaller. An important economy is the use of the refuse wood for fuel under the boilers. In the Roper plant there is a battery of six, and from the sawmill the waste is conveyed to a machine which cuts it into small scraps, which are carried by air pressure through a large tube to the furnaces. There are openings in this tube, each communicating with one of the huge fireboxes, and fresh fuel may be dropped at will upon either of the fires. All the waste is thus disposed of and a fuel that costs nothing except for the handling and which leaves but little ash is provided. The plant is operated wholly on the product of the woodlands. The Roper Company also has several other mills at various points, including quite a large one at Newbern, and it owns 600,000 acres of timber

land, besides having timber rights on 200,000 acres more.

There are now nine drainage districts, with a total of about 200,000 acres in process of formation, in North Carolina under the auspices of the drainage association and the State Geological and Economic Survey, of which latter Dr. Joseph Hyde Pratt, State Geologist, is head. Contract for dredging in Moyock district, near Moyock, in Currituck county, was recently let, as previously reported in the MANUFACTURERS' RECORD, to the American Steel Dredge Co. of Fort Wayne, Ind. This

district has just begun. The usual surveys will have to be made to determine the possibility of drainage and the manner thereof, after which a report will be made and the regular course followed to begin dredging.

Lake Mattamuskeet.—This district has about 120,000 acres, including the lake, which has an extreme length of approximately 15 miles and an extreme width of about 8 miles, covering something like 50,000 acres. This is in Hyde county, Belhaven. The district is organized and survey made.



J. A. WILKINSON'S RESIDENCE AT BELHAVEN, N. C.

work demands the handling of 733,000 cubic yards of material, and the district contains about 10,000 acres. The Carolina Land & Lumber Co. at Moyock owns 12,000 acres in this county, and it is intended to prepare their land for farming as soon as the principal canals have been finished. A demonstration farm to exhibit the fertility of the soil is to be established. It is said to be especially adapted to the cultivation of corn, potatoes, onions and celery.

About 50 miles of canals will be dug of an average depth of eight feet and from 18 to 36 feet wide at the bottom. These will be leveled and graded, so as to provide a good system of roads. This reclamation work is being done under plans and specifications prepared by the drainage division

Pungo No. 1, Pungo No. 2 and Pantego Districts.—These are in the region where the Wilkinsons are doing their work, and John A. Wilkinson is in charge of all three. The first district is in Washington county, between Pinetown and Belhaven, which latter is in Beaufort county; contains about 20,000 acres. The second adjoins the first, but is in the last-named county, and it contains about the same acreage. The third is also in Beaufort county, and has from 10,000 to 15,000 acres north of Belhaven.

Mosely Creek.—This district lies in Craven county, and has about 12,000 acres. A preliminary survey has been made.

Toisnot.—Here a canal has been dug through the swamp so that the drainage of the district has been practically effected.



LAKE MATTAMUSKAT, 15 MILES LONG, 8 MILES WIDE, TO BE DRAINED.

of the United States Agricultural Department. The land redeemed will be divided into 40-acre tracts, but it is stated none will be offered for sale until it is in fit condition for sure crops and it has been demonstrated what it will yield as well as the average annual earning capacity per acre. It will cost about \$150,000 to carry out the Moyock development thus described.

Other districts are as follows:

Bear Swamp, in Chowan county, near Edenton. It contains approximately 5000 acres. Bonds will soon be offered for sale and contract let for making the canals.

Lake Phelps.—The work of forming this

is in Wilson county, a few miles from the town of the same name.

Among other districts which are to be established are these: Creswell, in Washington county; Rich Square, in Northampton county; Dover, in Craven county; Lyon Swamp, in Pender and Bladen counties; White Oak Swamp, in Bladen county; Chadbourne, in Columbus county, and Angola Bay, in Pender county.

The wide interest in drainage work was shown by the attendance of delegates from 32 counties at the second annual drainage convention, which was held at Newbern November 11 and 12, 1909. Counties represented other than those before mentioned

herein were Pasquotank, Perquimans, Dare, Tyrrell, Bertie, Martin, Pitt, Pamlico, Gates, Jones, Onslow, Carteret, Lenoir, Duplin, Hertford, Sampson, Robeson, Cumberland, Brunswick, New Hanover, Greene and Edgecombe. Besides, there were appointed by the Governor 84 delegates at large.

At this convention Dr. Pratt described what was accomplished since the Geological Board four years previously authorized the investigation of the worth of swamp lands for farming and the feasibility of draining them. Much of this vast territory belongs to the State Education Board. The investigation included an inquiry into the quantity of peat in some of the swamps, and whether it was of marketable quality. It was found that wherever the land was of sufficient agricultural value its drainage could be accomplished, and that of 3,000,000 acres of swamp land in the State, at least 1,000,000 acres are worth reclamation. At the time of his address arrangements were being made to drain 300,000 acres, and since then the total has been increased. The completion of this work will make arable large tracts where in rainy seasons the crops have rotted in the ground and profitable farming was impossible.

Some interesting tables are presented in the report of this second convention showing the results of draining and cultivating three varieties of land, 40 acres of each kind. The profit at the end of five years from improving a poorly-drained farm of that size is shown to be \$10,678 net, which includes the value of the land (\$2400), which was originally \$1000. The net profit on gum swamp land is displayed as \$5103, the value of the land (\$2400) having been increased from \$200, its initial cost. On open marsh or "pocoson," reclaimed and cultivated in corn and cowpeas the net profit is given as \$4787, also including the increased worth of the land, raised from a valuation of \$80 to a reclaimed worth of \$2000. These examples were given to show possibilities under the State drainage act.

Moreover, drainage will abolish mosquitoes, make the country more healthful and prepare for agriculture some of the best lands in the State. J. O. Wright, supervising drainage engineer of the United States Agriculture Department, said at the last drainage convention that the State now produced less than 3 per cent. of the entire corn crop of this country, but that the swamp lands alone in North Carolina, if they were properly drained and cultivated, could be made to produce a crop of corn equal to 10 per cent. of all the corn raised in the United States last year.

The securing of settlers for lands which have been drained is a problem which is already being studied by the Messrs. Wilkinson and others interested in the drainage work, including the Norfolk & Southern Railway Co., whose lines will convey newcomers to their future homes in the reclaimed regions. It is believed that there will be many families now living in other parts of the country who will gladly seek to obtain reclaimed North Carolina lands, because of their great agricultural value and the mild climate which this region enjoys. Reduced excursion rates for home-seekers are offered by the railway from such basic points as Cairo, Ill.; Cincinnati, Evansville, Ind., and Louisville, besides Henderson, Owensboro and Paducah, Ky. The price of tickets for the round trip from any of these cities to sundry points in Eastern North Carolina does not exceed \$25, and it runs as low as \$15, the rates from Cincinnati and Louisville being the lowest.

The Norfolk & Southern, which traverses these new lands, is one of the pro-



gressive railroads in the South. It has a system of about 600 miles of track, and represents a consolidation of several lines, with the original Norfolk & Southern as a nucleus. It includes the Suffolk & Carolina, the Washington & Plymouth, the Raleigh & Pamlico Sound, the Atlantic & North Carolina and the Oriental & Western roads. The main line, upon which are operated commodious express trains on good schedules, is between Norfolk and Newbern, 171 miles. The equipment is new, clean and excellent. From Norfolk to Edenton, 83 miles, the running time is two hours and 25 minutes, including two stops. While stops farther south are more frequent, the through run from Norfolk to Newbern is accomplished in six hours and 25 minutes, or between 12.15 and 6.40 P. M.

A great improvement was recently made by the completion of a long bridge over Albemarle Sound, beginning at a point three miles from Edenton and extending across the water five and one-half miles to Mackey's Ferry. Until this bridge was opened for service about three months ago all trains were transported on a steam ferry boat across the sound, causing much delay. The bridge has a rolling-lift draw near its northern end and a swing draw near the other. It is most substantially built.

Another example of the enterprising spirit of the Norfolk & Southern is its late purchase of a fine gasoline motor car built of steel, which is operated on the Suffolk division. It is a complete train in itself, combining engine, mail car, express and baggage car, smoker and compartments for white and colored passengers, all in one vehicle, and it is large enough to seat 70 passengers.

The trains of the road, which maintain a high average of punctuality and adherence to schedules, are well filled with passengers, showing that the service is appreciated and popular, the expresses being especially patronized. The stations are attractive, and the accommodations for meals are good and of reasonable price. All this has grown out of uniting several small lines through a lumbering country, raising the standard generally and making them reliable common carriers. Great

credit is due to the men whose foresight and enterprise prompted the fulfillment of this needed plan.

As may be imagined, the Norfolk & Southern has an excellent freight traffic. It carries not only much lumber, but its transportation of fruits and vegetables, commonly known as "truck," is very large in the seasons when they are gathered and sent to market. The fish shipments are also extensive. During the two weeks from March 17 to March 31 of this year there were shipped from three points in North Carolina 11,305 boxes of fish, the boxes averaging in weight 275 pounds each. This was an increase of 4044 boxes, or more than 55 1/2 per cent. as compared with the same period in 1908. The shipments in detail were thus: Edenton, 1834 boxes; Hertford, 880 boxes; Elizabeth City, 8591 boxes, the increase being 781, 408 and 2855 boxes, respectively.

The lines reach, in addition to the places hereinbefore named, Raleigh, Goldsboro, Beaufort, Wilson, Washington, Oriental, Plymouth and Columbia, N. C., besides intervening towns, and Suffolk, Menden Point, Cape Henry, Virginia Beach and intervening points, all in Virginia. Recently the Kinston & Carolina Railroad was added to the system; it extends from Kinston (which is on the line to Goldsboro) southward to Pink Hill, more than 20 miles.

The officers of the Norfolk & Southern include Harry K. Wolcott and Hugh M. Kerr, receivers; E. T. Lamb, general manager; J. A. C. Groner, assistant to the general manager; H. C. Hudgins, general freight and passenger agent; W. W. Croxton, assistant general freight and passenger agent; F. L. Nicholson, chief engineer; R. S. Anderson, superintendent of the Northern division; Virgil Walker, superintendent of the Southern division; T. B. Ogle, superintendent of the electric divisions; M. Manly, treasurer; W. L. Bird, auditor; Edward R. Baird, Jr., general solicitor.

Legal arrangements are now under way to terminate the receivership, which was a result of the panic of October, 1907, and as soon as these plans are fulfilled the activities of the property will be even further extended. S. G. WILMER.

from the original plan only in the hastening of the work by letting the construction of the canals by contract and making it a requirement of the contract that the work shall be completed within three years. The State, as has been cited, was making but slow headway in the matter of opening canals for the reasons already stated.

The specifications that have just been issued are accompanied by a map showing the location of the canals, although it is stated that the exact location has not been definitely determined. This cannot be done, it is explained, until an extensive and detailed examination of the land traversed by them has been made to ascertain the depth of muck and the character of underlying material. This is to be done in advance of the excavation and the most feasible route selected. In determining the location of the canals the board makes it clear that it is the intention to follow the general direction shown on the map, but they expressly reserve the right to vary the course if a better and cheaper route can be determined. The engineer in charge is to make borings and have side stakes set at intervals of 100 feet and keep this work at least one mile in advance of the excavation. The drainage engineer is to time an accurate profile showing the surface of the ground, the depth of the muck, sand, clay and shells and the thickness of the rock.

It is provided that the bidders shall bid on each canal separate, and on the work as a whole; they are to bid on the rock excavation and the dirt excavation separately and as a whole. For example, it is estimated that there will be 18,000,000 cubic yards of dirt and 6,000,000 cubic yards of rock to be removed. All canals are to connect with Lake Okeechobee, and the canals are designated as follows: The North New River Canal, which will be 45 miles in length, from 50 to 65 feet in width, from 8.5 to 10 feet deep, excavation 4,774,375 cubic yards; the South New River Canal, 57 miles long, 50 to 70 feet wide, 10 to 13 feet deep, excavation 5,855,785 cubic yards; the Hillsboro River Canal, 50 miles long, 50 to 60 feet wide, 10 to 13 feet deep, excavation 6,101,310 cubic yards; the Miami Branch Canal, 22 miles long, 50 to 60 feet wide, 8 to 8.50 feet deep, excavation 2,282,026 cubic yards; Gulf Coast Canal, 60 miles long, 40 to 60 feet wide, 8.25 to 9 feet deep, excavation 5,052,430 cubic yards; total length, 238 miles, and total excavation 24,065,926 cubic yards. Hardly anything of essential information is left out of the specifications as issued from the press of the State printer. It is stated briefly that the need for the drainage arises from the overflow of Lake Okeechobee. This lake, it is stated, covers an area approximating 500,000 acres, and is situated in the northwest part of the drainage district, and after heavy and continued rains it overflows its banks and floods the land, commonly called the Everglades, which lies to the south and the southeast of the lake. It is for the purpose of lowering the level of the lake and controlling its flood waters and for affording an outlet for drainage that the canals are being constructed. The board casts an anchor to windward, however, by inserting a provision against the letting of a contract to cover the entire system of canals which have been inked out on paper, as follows:

"The board has available, it thinks, sufficient funds to construct all the work provided for in these specifications, but the number of miles to be awarded will depend somewhat upon the price submitted in the proposals. If all the canals are not awarded, they will be let in the following order," and then the designation of the canals as they are regarded the more im-

portant is made in the order previously enumerated, except as to the Miami Branch Canal. This is designated as third in the official preference.

This provision would lead the public to believe that the drainage commissioners are by no means certain as to the approximate figure that will be submitted for the work. As a matter of fact, there was such a wide variance in the bids that were offered on a previous occasion, being last December, when bids were called for, that it is difficult to understand how experienced contractors could reach such widely divergent views of the cost of such work. This may be explained partially by the fact that some of the bidders visited the Everglades and made an examination of the soil, and others did not. The cost of removal, so far as the operating expenses go and the amount possible for given time and certain machinery, is said to be much lower than other dredging, and not to be compared to that character of dredge work done by the Government in deepening rivers and harbors. The average cost of removal to the State, without taking fixed costs into consideration, was less than four cents a cubic yard. Dredging was probably never done cheaper than this. But the drainage commissioners know that it will be quite another matter with the contractors who will eventually do the work for the State of Florida. In the first place, they will have to buy machinery which is especially adaptable to this character of work; there will be some delay in the building of it, and the State expects to either lease or sell its own dredges to the successful bidders. For this reason the specifications contain descriptions of the dredges now in use by the State, and blanks are submitted for proposals to buy them and to lease them. The drainage engineer estimates that it will require from 60 to 90 days for the successful bidders to get their equipment ready to begin work. Bids will be received at Tallahassee until 10 o'clock of the forenoon of June 15, and the bids are to be opened and read before the board. The successful bidder or bidders will be notified immediately, and they will be required to make an acceptable bond upon contract within 15 days after having been notified that their proposals have been accepted. The contract shall cover 15 per cent. of the amount of the contract, conditioned upon the faithful performance and execution of the work. The bids are to be accompanied in the first place by a certified check for an amount equal to 2 per cent. of the amount of the bid, the check to be made to the treasurer of the State of Florida. The usual conditions covering the making of such contracts of importance, concerning the employment of labor and the payment of it, the assumption of damages, etc., are set forth in clear and unmistakable terms.

It is anticipated, as a matter of course, that the number of dredges will be materially increased, and necessarily so under the conditions of the contracts. It is said to be the purpose of the drainage commissioners, however, to use all reasonable pressure to hurry the work, and it is confidently predicted by some who are well acquainted with conditions that the work will be completed within 18 months after it is begun. The demands of the land companies and thousands of people who have purchased farms in the Everglades are behind this pressure for hastening the work. The demand for lands in the Everglades and consequently all other lands in Florida continues at a rate that at times becomes alarming to the old settler. It is recognized by those who most earnestly desire a healthy and wholesome development that all purchasers should thoroughly understand the conditions before they buy, and this has been hammered at so much

## To Dig 235 Miles of Drainage Canals in Florida.

[Special Correspondence Manufacturers' Record.]

Miami, Fla., April 30.

The Board of Drainage Commissioners of Florida, composed of the Governor, the Comptroller, the Attorney-General, the Commissioner of Agriculture and the Treasurer, have adopted a set of specifications upon which bids for the construction of a system of drainage canals for the drainage of the Everglades will be asked.

There are to be five main canals, which will approximate in length 235 miles, yet to be constructed. The drainage work has been in progress under the direction of the drainage commissioners for upward of two years, and in that time some thirty-odd miles of canals have been opened. The slow progress has been due to the fact that the work has been hampered by a lack of funds and a very limited mechanical outfit. But under a recent agreement reached between the State and the large land companies with holdings in the Everglades the suits which were being prosecuted by the land companies against the State attacking the constitutionality of the drainage tax have been withdrawn by the land companies agreeing to advance the amounts accruing under the drainage tax to complete the drainage system. This tax of five cents an acre is levied on an area of about 4,000,000 acres. The law was passed in 1907, and under the agree-

ment the tax accruing for five years is to be paid and advanced as needed to the commissioners. This insures a drainage fund of \$1,000,000 aside from the amounts that the State may accumulate through the sale of lands, for which there is at present a great demand, ranging from \$5 an acre upward, according to location with regard to the proposed canals. A few months ago when this agreement was reached the State engaged the services of J. O. Wright as chief drainage engineer. Mr. Wright had been in the reclamation service of the United States Government for a number of years, and has had a broad experience covering many years of active, practical work and observation with the great drainage and irrigation projects of the world. No better man could have been selected for the great work to be done in Florida. Mr. Wright began immediately to make an investigation of the area and to give attention to the location of the canals. After going over the territory he returned to Tallahassee and prepared a set of specifications for the drainage work under the new arrangement. The system of canals which had been laid out previously, however, under the guidance of Governor Broward, was not materially changed as to location. The broadening of the project and the scope of the work is increased

that at least some of the land companies are taking all possible care to prevent any misrepresentation. During the past week one of the land companies brought a Pullman carload of Missourians to Miami free of any cost. This bit of enterprise cost the land company some \$3000, but the value of it as an advertising plunge will prove to be, in all likelihood, more fruitful of real results than any other avenue through which the same amount might have been expended. The wonderful country is enough to attract an entrance, but when so many hundreds of persons have such a vague and entirely erroneous idea of the Everglades, the lay of the land, its disadvantages as well as its advantages, it is most desirable that they should have some actual knowledge before investing, for it is but natural that there will eventually be some disappointment, and it is much wiser for the land companies and the people of the State to take time by the forelock and do what they can to make those persons assume in the beginning the burden of the responsibility, so that it may be properly placed if that rueful day should arrive when they will regret their investment.

This is the only non-resonant note in the chorus of prosperity in Florida, which is due directly to the drainage work. It is coming to be recognized by all as the means of bringing thousands of settlers to Florida and of putting millions of dollars of taxable property on the revenue lists of the State.

Under the conditions as previously set forth it will be early in the fall before the amplified scheme of canal cutting will be put into operation. J. H. REESE.

#### KENTUCKY OIL FIELDS.

##### Healthy Revival in Developmental Operations.

[Special Cor. Manufacturers' Record.]

Barboursville, Ky., April 25.

A healthy revival is being manifested in Kentucky petroleum developments. The season is highly favorable for development work, and lately a number of new operators have started work in the established districts and in extensions of the productive area.

In the lower Kentucky districts new capital has entered the Wayne county fields, and within the next few weeks a number of drills will be moving. The field is gradually being widened, and much productive territory is in sight as a result of recent extensions of the old limits of production. Success in drilling outlying districts has encouraged operators to broaden the scope of operations, and several new centers for development work are being formed. Since the beginning of the month completions of the productive class have been steadily increasing in number, the trend of the drill being toward districts which are just being opened, and constituting extensions of the older pools. The established pools are still capable of yielding good producers, however, and among recent completions several in the middle class are credited to districts which have been pretty well punctured in the past.

Some of the new additions to the drilling force are testing the possibilities of untried fields, and this work will be of much importance as furnishing a line-up on possible future sources of production. During the past few days an extended leasing campaign has been conducted in counties of Eastern Kentucky bordering West Virginia, and in Western Kentucky contiguous to proven fields in that direction. In Lawrence county, the center of the new development work in Eastern Kentucky, several West Virginia companies have acquired leases and will drill a number of test wells during the summer months. As a possible deep-sand field this section

of the State will be tested for deep oil, and on the result much interest is centered. One or two test wells have been drilled and a deep-oil sand proven to extend through the district. This sand is pronounced identical to the formation in West Virginia, which has proven so productive, and if the tests which are soon to be started reveal oil in paying quantities in the same sand a widespread drilling campaign will result.

In the western end many new leases have been taken up by local, Northern and Eastern operators in the counties of Logan, Barren and adjoining districts. A drilling campaign is being started in Logan county to follow up the successes which attended drilling last season, and developments will be on a broader scale than formerly. Oil and gas have both been found in this section, and efforts will be made to develop these resources in sufficient quantities to warrant the establishment of a market. Among new development forces in Logan county is a company to utilize the natural-gas wells which have been drilled and pipe the product of wells to neighboring towns.

In the productive districts of Kentucky reached by the pipe line extensions the oil output is increasing, with the coming of

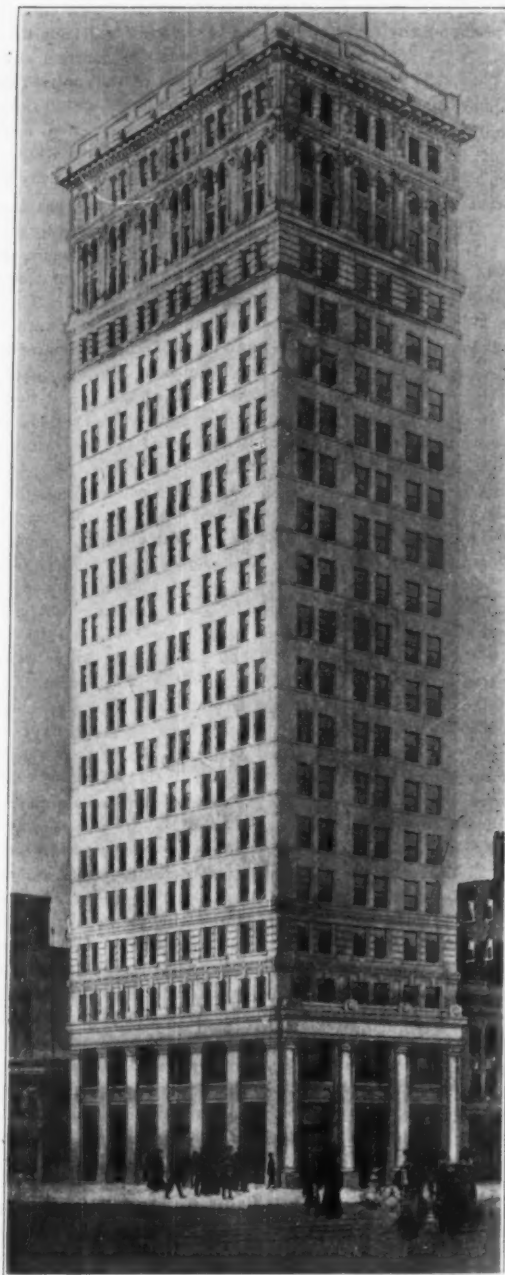
better weather and more favorable conditions for development work. The only retarding feature is the low price of crude oil, the prevailing figures being the lowest quoted since a market was established. The two grades of Kentucky crude oil are quoted at 72 and 45 cents per barrel, respectively, by the Standard Oil Co., and 75 cents per barrel on the better grade by independent purchasers. There are now in storage in the various districts over 300,000 barrels of the high-grade crude.

W. S. HUDSON.

#### To Erect Fertilizer Plant.

A dispatch from Chester, S. C., states that representatives of Swift & Co., Chicago, have inspected a site at Chester, which will be utilized for the erection of a fertilizer mixing plant. The site is accessible to the Seaboard Air Line, Southern and Carolina & Northwestern railroads, and it is said to be the intention of the company to erect a plant of 10,000 tons capacity.

The annual addresses of President J. N. King and Secretaries Wilson M. Hardy and J. D. McCartney of the Manufacturers and Merchants' Association of Floyd county, Georgia, Rome, have been published in pamphlet form.



AMICABLE LIFE INSURANCE CO. BUILDING, WACO, TEX.

To be erected; 20-story structure; 50x105 feet; cost complete \$500,000; architects, Sanguinet & Staats of Fort Worth, Dallas, Houston and San Antonio.

#### TWO NEW STEAMSHIPS.

##### Merchants & Miners' Company to Add to Its Fleet.

The Merchants & Miners' Transportation Co. has awarded contract for two modern single-screw steel coastwise steamships, the successful bidders being the New York Shipbuilding Co. of Camden, N. J. These steamships will be built for both passengers and freight, and especially for the Baltimore-Savannah-Jacksonville line.

The construction of these ships will be of the hurricane-deck type, with three complete decks and a promenade deck, fitted with double bottom and water-tight compartments, and equipped with every modern appliance for safety and convenience. Each of these steamships will be of the following dimensions: Length over all, 333 feet; molded beam, 46 feet; mean load draft, 18 feet; tonnage, 3600. They will be driven at a mean speed of 13 knots by triple-expansion engines, the steam being supplied by four single-end return tube-Scotch boilers, with sufficient reserve power to increase the mean speed when required.

The passenger accommodations on these steamships will be located on the promenade and hurricane decks, having stateroom accommodations for 132 first-cabin passengers and 20 second-cabin passengers. The first-cabin staterooms will be all outside rooms, large and well ventilated, with upper berths folding, supplied with running water, electric light and every modern convenience. Most of the staterooms will be communicating, so that they can be used single or en suite. There will also be a number of specially-fitted staterooms with brass beds, connecting baths and toilet conveniences, and also a number of rooms connecting with shower baths and toilet conveniences, these special rooms being similar to compartments and drawing-rooms in a modern Pullman car. The stateroom accommodations throughout will be par excellence. A large dining saloon will be provided, located about amidships on the promenade deck, with seating capacity at the tables for 82 persons. The interior woodwork of the dining saloon and social hall will be of the finest dark mahogany. The smoking-room, situated on the hurricane deck forward, will be a very large, cheerful room, finished in teakwood. The furnishings of these ships will be of the best, and in perfect harmony with the particular woodwork. The large covered decks will be particularly attractive to the traveler, and will form a grand promenade. The captain's, officers' and crews' quarters will be most comfortable, and particularly arranged for their convenience.

The Baltimore-Savannah-Jacksonville Line, on which these two steamships will be placed when completed, has been extremely popular with the traveling public since its inception, and with these two new steamships, which will go into service in about a year's time, will give to the traveling public between the South and Baltimore as fine, if not the finest coastwise service to be had.

For the convenience and quick handling of freight special attention has been given to the arrangement of these steamships, which will facilitate the prompt handling of their cargo.

The Merchants & Miners' Transportation Co. is the largest independent coastwise steamship line in this country, having now in operation 23 modern steamships, operating over about 3500 miles along the Atlantic coast, and carrying passengers and freight between Baltimore, Boston and Providence (via Newport News and Norfolk); between Baltimore, Savannah and Jacksonville; between Philadelphia and Savannah, and between Philadelphia, Fall River and Providence.



## COTTON OIL MILLS AND SEED FOR REPLANTING

By L. A. RANSOM of Atlanta.

[Written for the Manufacturers' Record.]

The cottonseed-oil manufacturers of the South are entirely dependent upon the supply of cottonseed to run their mills, as they do not use any other raw materials in their crushing operations. The most thoughtless American citizen would, therefore, see that if the farmers do not have sufficient seed for planting, and if the mills did not have the seed, that it is to the interest of the mills to furnish the farmers with the seed. It is inconceivable that anyone should think differently.

The proof of the good relations existing between the oil mills and the farmers, if proof is needed, can be found in the annual proceedings of the Interstate Cottonseed Crushers' Association's annual meeting, held at Jamestown, Va., in May, 1907, which meeting followed immediately after unfavorable conditions to the cotton crop in that year. The following resolutions were unanimously adopted by the association:

"Whereas, the unprecedented and unfavorable weather conditions for several months which have prevailed throughout the entire cotton belt has amounted to what is really a national disaster and threatens alarmingly the success of what is everywhere recognized as among the world's most important natural productions, the cotton crop of the South; now be it hereby

"Resolved by the Interstate Cottonseed Crushers' Association, in annual convention assembled, That our earnest sympathies are extended to our friends and co-workers in the South's interstate development, the cotton producer and cotton worker throughout the entire country; and be it further

"Resolved, That we tender them our co-operation in the strenuous efforts they are making to repair the great damage done them, and to restore in the few days now remaining in the rapidly-passing planting season, the crops destroyed or yet unplanted, and that we invite their correspondence in order that we may endeavor to supply them, from such stores of seed as we have retained for that purpose, with the necessary seed for planting and seconding their efforts in the restoration of that great plant upon which more than any other the happiness and comfort of the whole world depends."

There is sometimes, during the seed-selling season, some friction between the oil mills and the farmers, which is nothing more than differences of opinion between the manufacturer, the buyer and the farmer, the seller of the seed, regarding prices, but whenever the farmer needs help that the oil mills can give him it has always been, and doubtless always will be given by the oil mills, if for no other reason on the part of the mills than that of self-interest.

During the season just closed the oil mills have paid exorbitant prices for seed. This was brought about by lively competition and by the constantly-advancing markets for the products, and consequently what seed the oil mills may have on hand have cost them very high prices, and, of course, if it is necessary for the mills to return the seed to the farmers they will do it, and the farmers will hardly expect them to do it at less than cost.

Now and then some narrow-minded mill manager will endeavor to take advantage of the farmers' necessities and charge them a high price for the seed, more than the actual cost. There are selfish men in all business, but in the cotton-oil business they are the exceptions. Throughout Georgia those mills that were still crush-

ing closed down and stopped work until they could ascertain just how many seed the farmers would need, and this fact was advertised throughout the territory. It was soon learned, however, that the reports of the damage were probably exaggerated, and as the mills were called on for only a comparatively small amount of seed, they resumed operations, but not until they were satisfied they had filled the farmers' requirements for seed. It is expensive to close down a mill, and in doing this the mills certainly showed a desire to do everything possible to help the farmers.

Where seed are drilled it usually requires for planting about one bushel to the acre, but in order to provide for the possibility of replanting, the farmers generally reserve about two bushels, and, although they realized very high prices for their seed this year, they doubtless followed their usual rule in this respect, which accounts for the fact that only to a limited extent were the oil mills called on for seed, and those were promptly supplied.

### The Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., May 2.

While there has yet been no definite mark reached that could safely be considered the base price, it is generally conceded that \$12 for prompt and nearby shipments is the market price, with \$12.50 being asked for third and fourth quarter business. Nominal figures continue to be quoted by some interests, and business is being taken right along at higher figures than \$12 for prompt shipment. As a rule, no one is pressing the sale of his product for delivery through the last quarter. However, no refusal to quote is recorded, and it is understood that that delivery can be grouped along with second and third quarters if asked for. Probably 1000 tons a day will cover actual sales during the past week. The most of this tonnage is composed of car lots up to 100 tons. There has been some talk of \$11.50 to \$11.75 per ton iron, but the writer actually knows of a purchaser offering \$11.50 per ton for 5000 to 6000-ton lot, on which proposition he was turned down. For strictly standard Alabama iron it would be unfair to say that the price at present is lower than \$12 per ton at the furnace. Production has and is being very much curtailed. Two important interests are now seriously considering blowing out at least two furnaces in the immediate future. This, of course, is only in line with action already taken by certain of the Northern interests. Southern charcoal iron is quoted at \$22 to \$22.50 per ton at the furnace.

During the past week Kansas City placed an order for 4000 tons of water pipe; also St. Louis for 2000 tons. Some small lettings for Southern cities are recorded. The writer, in conversation with an official of one of the important pipe interests here, was advised that his order-books were in good shape, and that prices are firmly held at recently quoted figures, with upward tendency. Following are prices quoted per net ton f. o. b. cars here: Four-inch, \$24; 6, 8 and 10-inch, \$22; 12-inch and over, average of \$21, with \$1 a ton extra for gaspipe; fittings, \$60.

There is but one characteristic of the old-material market, and that is continued dullness, with downward tendency. While this is not very encouraging, yet it about sounds the situation. Dealers are unwilling to pile more scrap under present conditions. The buyers of the country seem to have the "greatest sufficiency." The fol-

lowing nominal quotations per gross ton f. o. b. cars here prevail:

Old iron axles, \$18.50 to \$19.

Old iron rails, \$14.50 to \$15.

Old steel axles, \$16.50 to \$17.

No. 1 railroad wrought, \$11.50 to \$12.

No. 2 railroad wrought, \$10.50 to \$11.

Dealers' wrought, \$10 to \$10.50.

Old steel rails, \$11 to \$11.50.

No. 1 machinery, \$10 to \$10.50.

No. 1 steel, \$11 to \$11.50.

Old standard car wheels, \$12 to \$12.50.

Light castings, stove plate, \$8.50 to \$9.

On Thursday afternoon, the 28th of April, the Alabama Coal Miners' Association met in the auditorium of the Chamber of Commerce, where the matter of increase in wages was thoroughly threshed out. It was finally decided to increase the wages of miners and other day men 5 per cent. over the present Pratt scale. This means an additional 2½ cents per ton in the mining of coal. Some 18,000 to 20,000 workmen in the district will be affected by this increase in wages. The increase was wholly voluntary on the part of the operators.

### INDUSTRIAL GADSDEN.

Municipality and Business Men Aggressive for Progress.

[Special Cor. Manufacturers' Record.]

Gadsden, Ala., April 30.

Situated in the northwestern section of Alabama, 90 miles south of Chattanooga, 60 miles northeast of Birmingham and 90 miles west of Atlanta, is the thriving city of Gadsden. It is prospering because of the alertness of municipal authorities and the aggressiveness of live, wide-awake business men. Through the Business Men's Club a cash bonus of \$150,000 was offered last year to the Southern Iron & Steel Co. as an inducement to locate a plant here to employ at least 3500 men. Of the bonus, \$75,000 was to be paid as soon as the plant began operating, and the balance as soon as the plant should be running at its full capacity. The plant, representing an outlay of several million dollars, is already operating several departments, and the first payment of \$75,000 has recently been made by the Business Men's Club. On April 12 the company had on its payroll 2400 men, and, with the completion of the wire, rod and nail department, it will be employing 3500 workmen. A great amount of the machinery for this branch is already installed, and it is only a question of a short time before the latter departments will be complete.

The people of Gadsden are so well pleased with the results of the offer made to the Southern Iron & Steel Co. that they have recently made another offer of a cash bonus of \$150,000 to the Alabama Consolidated Coal & Iron Co. to establish a plant adjoining its present property and to equal in size that of the Southern Iron & Steel Co. This proposition is now being considered by the officials of that company.

With new industries coming into this city and the increased population which of necessity must come with every new enterprise of any size the question arises, How will Gadsden house the operatives of these industries? Personal inquiry developed the fact that at present there is hardly an untenanted house in the city, notwithstanding the fact that new homes are constantly being built. Since last November there have been erected about 600 dwellings, yet it is conservatively estimated that 1000 more dwellings must be erected in the immediate future to take care of the operatives of the Southern Iron & Steel Co. An official of the steel company stated that it was even now a problem as to how the company will be able to house the additional operatives and their families who

will be coming into Gadsden with the completion of the plant.

There has been erected at a cost of \$100,000 a new postoffice, and an additional appropriation of \$90,000 has been asked for the purpose of adding two more stories in order to provide suitable quarters for the Federal offices. With the completion of the addition this community will have a postoffice that would be a credit to any city.

The Louisville & Nashville Railroad has just completed and is now using in connection with the Nashville, Chattanooga & St. Louis Railway a handsome depot. This structure has ample facilities as a union depot, and there is talk of the other roads entering Gadsden, the Southern Railway and the Chattanooga Southern, using it. This structure, including the land, cost approximately \$100,000. The Louisville & Nashville Railroad has also just practically completed a new bridge across the Coosa River at a cost of \$75,000. This improvement was absolutely necessary because of the increase of traffic through the city.

During the past two years cement sidewalks have been laid on all of the principal streets at a cost of \$50,000. A short time ago the Graves-Matthews Company of Birmingham secured a contract of \$50,000 for paving streets in the business center. The material being used is vitrified brick, and the work is well under way. It is expected the streets will be opened for traffic within 60 days.

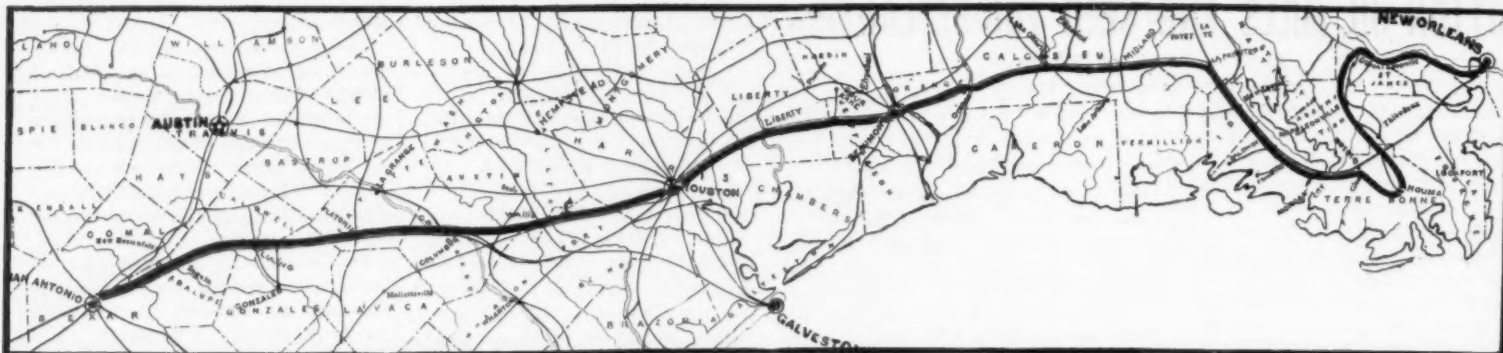
There is a movement to improve Locust street its entire length. The Louisville & Nashville Railroad enters Gadsden through this street, and has the right of way. The streets in the residential section are to be graded, cherted and then treated with a preparation of asphalt. An Atlanta concern, it is understood, will grade and treat Forest avenue with this patent asphalt preparation. The contractors claim that this preparation will lay the dust and keep the street dustless for one year, and the cost of treating the streets with this preparation is said to be much less than it would cost the city to keep the streets sprinkled with water. If this preparation proves a success on Forest avenue the entire residential section will be treated in a like manner.

This city owns and operates the water-works system. At a recent meeting of the City Council the plans prepared by J. N. Hazelhurst, consulting engineer of Atlanta, Ga., were adopted for the rebuilding of the pumping station and settling-basin. This improvement calls for an expenditure of \$50,000, and bids for the work will be opened on May 18, 1910. When the plant is completed Gadsden will have one of the best-equipped water-works systems of any city of equal size in the South.

A bond issue of \$50,000 has been decided on for additional school facilities. It is proposed to erect several ward schools, one of these to be near the Southern Iron & Steel Co.'s plant, and another larger building to cost \$30,000.

The Alabama City, Gadsden & Attalla Railway Co., operating a street-car line from Gadsden to Alabama City, and thence to Attalla, has recently put a force of men at work to construct a new line to North Gadsden. This line will be over a mile in length, and will be ready for service some time in June. It will be of great service to those employed at the plants of the Alabama Consolidated Coal & Iron Co., the Coosa Pipe & Foundry Co., the Campbell Manufacturing Co. and other minor industries along its route. The men employed in these plants number about 1700, and the opening of this branch is eagerly looked forward to.

Speaking of Gadsden's future and growth, Mr. E. T. Hollingsworth, presi-



A CONTINUOUS IMPROVED HIGHWAY FROM NEW ORLEANS TO SAN ANTONIO.

One of the big projects of highway improvement in the South is that for a first-class continuous road from New Orleans, La., to San Antonio, Tex. Mr. Sam Park of Beaumont, Tex., is the enthusiastic leader in the movement for this highway, the whole route of which has been traversed in an automobile, with good roads reported in many of the links. The highway swings from New Orleans to Houma, and thence through Gibson, New Iberia, Lafayette, Midland and Lake Charles, La., to Beaumont by way of Orange, Tex., and on through Liberty, Houston, Wallace, Luling and other points to San Antonio.

dent of the Business Men's Club and also president of the Gadsden National Bank, said:

"I believe by the end of this year Gadsden will show an increased population very nearly double what it was two years ago. I think the population within the corporate limits will approximate 12,000, and the population of what is really Gadsden, including suburbs of north, east and west Gadsden, will easily reach 18,000.

"During the past two years we have located a number of new manufacturing plants, such as the Campbell Manufacturing Co., the Southern Shovel Manufacturing Co. and the establishment of the large wire, rod and nail mill. In addition to this, we have built many new and handsome residences and one of the most complete and artistic theaters in the State. A four-story office building is now under contract, the construction of which will be begun at once.

"The future of Gadsden never before looked so bright as it does now. We feel that Gadsden has passed beyond the stage of uncertainty, and, with the establishment of the two steel mills, we are convinced that our population will easily reach 40,000 within the next four or five years. It would put us in the unique position of having two independent steel mills equipped with plants for the manufacture of rods, wire and nails and structural material. The possession of two such plants could certainly not be duplicated in the South."

The Dwight Cotton Mills are at Alabama City, really a suburb of Gadsden, and a model mill town of the South. In it there are many first-class houses and comforts provided for the operatives by the Dwight Mills. This plant employs about 1700 operatives, and is one of the best mills in the South, not only in its successful operation, but also in the character of its employees and the generous treatment of them by the company.

MILES C. SHOREY.

#### Yellow River Power Co.

The Yellow River Power Co. has been incorporated with a capital stock of \$1,000,000 for the purpose of building a water-power electrical plant on the Yellow River, four and one-half miles from Stone Mountain, Ga. It plans the construction of a concrete dam to develop 1500 horse-power for transmission by electricity. J. B. McCrary, Empire Building, Atlanta, Ga., and associates are the incorporators.

#### Ohio Valley Exposition.

The management of the Ohio Valley Industrial Exposition, to be held at Cincinnati August 29 to September 24, has issued an artistic prospectus illustrative of the advantages expected from the exposition for Cincinnati, especially in its relations to the South. Mr. F. B. Davison is commissioner-general of the exposition.

#### PLIGHT OF COLLEGES.

**Their Groveling at the Pension Trough of Philanthropy.**

[Springfield (Mass.) Republican.]

Most emphatically objectionable is a private pension system for any State university in America. The University of Missouri ought to be ashamed of itself for being on the "accepted list" of the Carnegie Foundation. The principle involved is vicious, since there is as much reason for having Mr. Rockefeller pay the pensions of the United States Army or the New York Police Department, or of any other public service, as for allowing Mr. Carnegie to pay the pensions of teachers in public institutions which are, in all other respects, controlled and supported by the State. Since Mr. Carnegie very unwisely decided to admit State universities to a share in his bounty, he has seriously contemplated pensioning the teachers of the public schools in 10 of the largest cities of the country. The principle of such private intervention in the business of the State is not only vicious, it is demoralizing in practice, and, if long continued, it must have results gravely injurious to democratic ideals. Yet the university of Missouri is not alone in groveling at the pension trough of the Carnegie foundation. The universities of Michigan, Wisconsin and Minnesota have also been "accepted." And there are no less than 26 other State universities now clamoring for a place in line. Dr. Pritchett is looking them over to determine whether they are fit to be the beneficiaries of Mr. Carnegie's generosity.

The responsibility, of course, for this degradation of State universities, whose teachers should be pensioned by the State or by nobody, does not rest upon the teachers of those institutions. But while the *Republican's* sympathy for them is keen, it confesses to have witnessed with a certain grim satisfaction the recent demonstration of what they are up against as beneficiaries of the Carnegie pension funds. For the change in the rules \* \* \* has exposed the system, which has been the main object of our attack. This private pension agency not only disburses funds, but it also seeks to control in some measure the institutions that have come within its financial sphere of influence. It can do this in various ways, and its supervisory control is based primarily not only upon the power to drop an institution from the "accepted list," but upon that very provision under which it can change its pension rules from time to time, as experience dictates or the wisdom of its trustees commands. \* \* \* It may be said that while disappointed professors may have a just grievance against the administrators of the Carnegie foundation in matters of detail—to wit, those who unhappily arranged their life insurance in accordance with Dr. Pritchett's advice—it is difficult to accept the view that in general they are

the victims of a real breach of trust. They took their chances when they became the beneficiaries of a private pension fund. And, in our opinion, the future policy of the foundation is to a certain extent "a hazard or a gamble, where each guesses at his peril." But the *Republican* does not "approve." It advises the Missouri Legislature to withdraw the State university from the Carnegie "accepted list" and provide a State pension fund for the professors of that institution, if such a system be deemed an advisable development of public policy. In any event, whether the professors are pensioned or not, no private individual should be allowed to provide them such an emolument.

#### A Sign of Macon.

In token of its desire to co-operate heartily with progressive communities in the territory which it will serve, the Central Georgia Power Co., in preparation for the beginning of the operations of its hydro-electrical plant on the Ocmulgee River, has offered to supply to the municipality of Macon for five years free of charge sufficient electric current to illuminate a great sign bearing an inscription in keeping with the city's best interests. The company, through General Manager E. J. Cagney, expects the city to erect the sign of steel on the highest point within the city limits, so that it may be visible to everybody coming to Macon, and the company undertakes to illuminate the sign from dusk to midnight, except in cases where, because of excess demands on its power plant, it would not have any power to spare, although such a situation is hardly expected.

#### South Atlantic Quarterly.

The current issue of the *South Atlantic Quarterly*, edited at Trinity College, Durham, N. C., contains articles on "The South in National Politics," by William Garrett Brown; "Science in Its Relation to the Industrial Development of the South," by Lewis W. Parker; "A Little Experiment in Enforcing a Fourteen-Unit Entrance Standard," by Henry N. Snyder; "The German Element in the Settlement of the South," by William H. Wanner; "The Necessity for Road Improvement in the South," by Logan Waller Page; "The Antecedents of the North Carolina Convention of 1835," by William K. Boyd; "The Relation of Agricultural Education to Conservation," by John H. Reynolds, and "Conservatism and Progress," by William P. Few.

#### Doe River Company's Plant.

The Doe River Lighting & Power Co. of Elizabethton, Tenn., has awarded contract to the Lowe Construction Co. of Bristol, Tenn., for the construction of the dam for its water-power-electrical plant on the Watauga River. This plant will be located seven miles east of Elizabethton

and develop 3000 horse-power for transmission a distance of 22 miles. The dam will be of concrete, 300 feet long, 50 feet high, and have a base of 48 feet, costing about \$77,000; power-house of concrete, 40x100 feet. About \$250,000 will be the total expenditure for dam, power-house, water-wheels and accompanying equipment, electrical machinery, etc. The electricity will be transmitted to the Bristol (Tenn.) Gas & Electric Co., with whom the Doe River Company has contracted to furnish electrical power for distribution. The Doe River Lighting & Power Co. is in the market for the water-power and electrical machinery, and invites bidders on the hydro plant to inspect the proposition not later than May 15, so that bids can be submitted by June 1. The electrical proposition will be considered as soon as the speed of the water-wheels has been determined.

More than 250 men of Wake, Durham, Orange, Alamance and Guilford counties attended last week the meeting at Durham, N. C., urging liberal appropriation by the State for road improvement and the employment by each county of a competent highway engineer.

It is reported that a Chicago capitalist has secured 25,000 acres of land in Hampton county, South Carolina, which will be drained and divided into small tracts for trucking purposes.

The Chamber of Commerce of Newport News, Va., is planning a campaign to reclaim thousands of acres of land in Sawyer Swamp, about three miles northeast of the city.

The Chamber of Commerce of Wichita Falls, Tex., has begun the publication of a monthly paper designed to promote the growth of that locality.

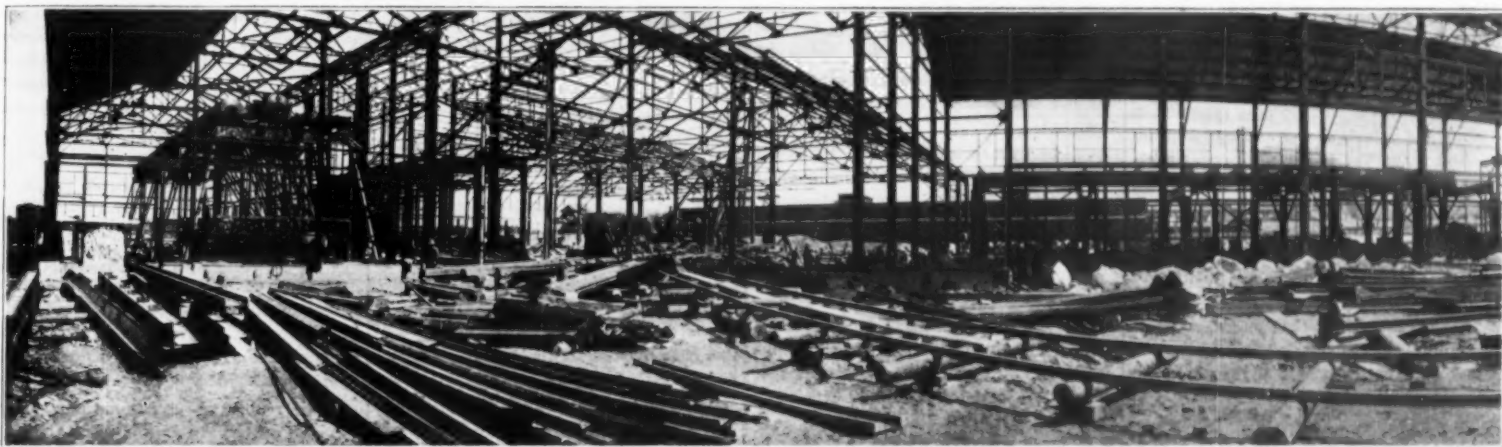
The latest bulletin of the Maryland Agricultural College publishes the second annual report of the Maryland State Bee Keepers' Association.

A History of the Logarithmic Slide Rule and Allied Instruments. By Dr. Florian Cajori, Dean of the School of Engineering, Colorado College. Publisher, the Engineering News Publishing Co. Price \$1 net.

The slide rule, one of the machines for minimizing mental labor in computation, has been adapted to almost every branch of the arts in which calculation is required. This work undertakes to give a complete history of the improvements in the slide rule made in England previous to the year 1800, and to determine more precisely than ever how extensively this instrument was put to practical use at that early time, and also to indicate the many-sided developments in the design of slide rules made during the last hundred years.



## VIEWS OF THE PLANT OF THE NORFOLK PORTLAND CEMENT CORPORATION.



Some time ago the MANUFACTURERS' RECORD announced the organization and plans of the Norfolk Portland Cement Corporation. It was stated contracts were awarded for steel buildings costing \$150,000, and that the cement machinery, boilers, engines, etc., would cost \$500,000. Construction has been progressing, and three accompanying illustrations present views of the plant, at Norfolk, as it is at present. All the steel work excepting one building has been completed, and three boilers are in place ready for bricking in. One engine is about to be set on foundations, and the other two engines are on the way. The plant is constructed with 125-foot kilns for a daily output of 3000 barrels, or an annual output of about 1,000,000 barrels of Portland cement. It is expected to begin production by August. This plant, located on deep water and convenient to eight railways, gives the company adequate shipping facilities by rail and water. R. E. Griffith is president of the Norfolk Portland Cement Corporation, main offices in the Pennsylvania Building at 15th and Chestnut streets, Philadelphia, and H. F. Bascom is resident engineer at Norfolk. This corporation is a branch of the American Cement Co. of Philadelphia.

#### Alabama Consolidated.

At a recent reorganization of the board of directors of the Alabama Consolidated Coal & Iron Co. the following board was elected: J. W. Middendorf, Douglas H. Gordon, William Ingle, R. Lancaster Williams, James L. Sellman of Baltimore; Harry S. Matthews of Birmingham, Ala.; Jos. H. Hondley of New York, H. S. Meserve of Washington and K. L. McLaren of Jersey City.

Messrs. Middendorf and Williams are members of the firm of Middendorf, Williams & Co.; Mr. Ingle is vice-president

of the Merchants' National Bank, Baltimore; Mr. Douglas H. Gordon is vice-president and chairman of the executive committee of the Baltimore Trust Co.; Mr. James L. Sellman is a member of the firm of James Bonday, Jr., & Co., an importer and capitalist, and also a director in the Merchants' National Bank.

#### Refrigeration.

The American Association of Refrigeration, Frank D. LaLanne of Philadelphia, president, and J. F. Nickerson of Chicago, secretary, will hold its first annual convention at New York May 9 and 10. At

this meeting the organization of the body will be perfected and questions pertaining to cold storage will be discussed. The association includes in its membership the American Warehousemen's Association, American Society of Refrigerating Engineers, American Meat Packers' Association, Western Ice Manufacturers' Association, Southwestern Ice Manufacturers' Exchange, Southern Ice Exchange, Eastern Ice Association, Illinois Ice Dealers' Association, Indiana Ice Dealers' Association, Iowa Ice Dealers' Association, Middle States Ice Producers' Exchange and the National Ice Association of America.

#### To Develop Mineral Properties.

Dispatches from Alexandria, La., state that F. F. Myles of New Orleans will develop mineral deposits on 8000 acres of land in St. Landry parish. It is understood that the property contains oil, rock salt, gypsum, sulphur and limestone in marketable quantities, and that Mr. Myles has already begun preliminary developments by drilling holes.

About 1000 acres of land near St. Augustine, Fla., is being developed into a great celery tract.

# SOUTHERN COMMERCIAL BODIES WANT INDUSTRIES

## WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

### HOW ONE CITY GROWS.

Advertising Club,

Oklahoma City, Okla., April 25.

*Editor Manufacturers' Record:*

I write to express the feeling of gratitude of the members of this club for the splendid article on "Oklahoma City's Growth," which appeared in the MANUFACTURERS' RECORD of April 21. This article, we feel sure, will prove to be a potent factor in increasing the already great interest that has been awakened in every part of the country with regard to Oklahoma City. Your correspondent has made this article of full value to this city through his absolute truthfulness and lack of exaggeration. His opening sentence in the article is both strong and apt, and the closing paragraph is a well-deserved testimonial to a Chamber of Commerce which probably approaches the unique among such bodies. The Chamber of Commerce of this city numbers now 1200 members, each paying dues of \$2.50 per month and standing strongly united behind an able leader for everything that goes to material progress, educational advancement and other uplifting influences of the city.

WILLIAM TAYLOR,  
President.

### WATER-POWER AND MINERALS.

Board of Trade,

Erwin, Tenn., April 30.

*Editor Manufacturers' Record:*

Erwin is located centrally in Unicoi county, Tennessee, Unicoi county being bounded on the east by Yancy county, North Carolina, one of the rarest timber sections in the South, and also rich in mineral deposits of various kinds, principally iron and mica. Erwin has an elevation of 1750 feet, in a very picturesque little valley in the heart of the Unaka Range of mountains, the valley bearing the same name as the mountain range. The climate is unexcelled in its salubrity, while the crystal springs bubbling from the foot of the nearby mountains furnish an unlimited supply of freestone water for both domestic and commercial purposes. Only three miles south of Erwin is the summer resort, Unaka Springs, with its springs of chalybeate water.

As for water-power, this little town, nestled so securely in the heart of the mountains, is wonderfully blest by nature, for from the south the Nolachucky River winds its tortuous course from gap to gap until it flows in a placid stream through the center of the Unaka Valley, while the North Indian, South Indian, Matin's and Rock creeks flow into the river in the immediate vicinity of the town itself. The possibilities for power development in this valley has for many years escaped the notice of capital, but during the past 18 months a corporation has been formed for the purpose of developing this water-power, which will furnish electric current for hundreds of industries and employment for many persons. This corporation, known as the Nolachucky Developing Corporation, will commence the construction of a concrete dam on the Nolachucky River at a point known as the Devil's Looking-glass, one mile from Erwin, early in June at an approximate cost of \$300,000. It is estimated by competent engineers that when this dam is built that it

will furnish at least 5000 horse-power in dry season.

O. P. Heath & Co., the cotton-mill people of Charlotte, N. C., will build a 60,000-spindle cotton mill in Erwin. The orders for the machinery having been placed, construction on the mill will be commenced in June or July, the Carolina, Clinchfield & Ohio Railroad donating the land upon which to erect the building. In this connection it may be said that the Carolina, Clinchfield & Ohio Railroad owns 1500 acres of land in and around Erwin, and it is quite probable that it will donate building sites to other industries desiring to locate in Erwin, in addition to offering competitive rates on transportation.

Unicoi county itself is rich in virgin forests of timber which offer inducement to investors interested in woodworking plants of every description, and tanneries. There are also many rich ore deposits, principally iron, lead and mica.

The Embreville furnace, located at Embreville, Tenn., is soon to be dismantled and located at some other place, perhaps at Erwin, on account of the nearness of mineral lands and of Carolina, Clinchfield & Ohio Railroad shipping facilities.

Mineral rights are owned in this country, which we believe only require proper development to be of permanent value, unequaled anywhere in the Alleghenies. Some of these properties two miles from Erwin, on Rock Creek, were worked upon a small but paying basis by local capital until the panic of 1893, at which time they were forced to cease operations from lack of funds and because of their inability to build washers. Then the ore was hauled two miles by wagon and shipped via Johnson City. Now that the railroad facilities have improved, this work could be carried on at a minimum cost. These facts, together with reports that are being circulated, lead us to believe that Erwin stands a chance to be a mining as well as a manufacturing town.

With what has already been done in Erwin during the past 18 months, and the excellent opportunities offered to other investors, it is safe to say that Erwin will become in due course of time one of the most thriving and substantial towns in East Tennessee, since its growth is based upon tangible business enterprises, and not upon the imaginative vagaries of the newspaper correspondent.

Erwin has a live Board of Trade, and any member stands ready to entertain guests or to cheerfully furnish information. The secretary will give all correspondence prompt attention, and will give only accurate information.

J. S. DUNN,  
Secretary.

### SITES FOR INDUSTRIES.

Thomasville, N. C., April 27.

*Editor Manufacturers' Record:*

Thomasville has two miles of belt railroad encircling the town along an abundant stream of water, affording magnificent sites which are offered free to manufacturing plants. These sites are especially suitable for textile plants, as they are located on the main transmission line of the Southern Power Co. Long term tax exemption is offered by the town.

There is abundance of cheap labor, particularly for textiles, available, as the men of the families work in chair factories. Thomasville is on the main line of the Southern Railway, just 12 miles from where the new Southbound (Atlantic Coast Line and Norfolk & Western) crosses the Southern.

The climate is exceedingly healthful and favorable. The city is in the center of the Piedmont region. Fifteen woodworking plants, principally chair plants, are now here. Two new cotton mills are being completed.

J. L. ARMFIELD.

### HOW DEL RIO WORKS.

Commercial Club,

Del Rio, Tex., April 14.

*Editor Manufacturers' Record:*

It is doubtful if a better example of the immense development of the entire South could be cited than the accomplishments that this town, through its Commercial Club, has achieved during the past few months. Organization of the club was perfected in September, 1909, and the efforts of the officials were at once directed to getting a north and south railroad for the city. The work was handled in such manner that by January 1 this year a proposition had been made the club by the management of the Kansas City, Missouri & Orient Railroad to build a line from San Angelo, Tex., to the border here, and at the same time a proposition from Mexican authorities was made the club that a line from that side of the Rio Grande would be built whenever we gained the Orient. By exerting every known effort and devising new methods the people of Del Rio "made good" on their contract to buy \$150,000 worth of the Orient's first mortgage bonds, in addition to furnishing gratis the right of way through town and the county, and on April 1 the club announced to the Orient management that the first payment on the bond purchase was in the local banks as per letter of the contract. No town ever brought more varied influences to bear upon a proposition than Del Rio did on this railroad matter. Every organization, of every description, that the town boasted contributed in some manner to this bond purchase. One little girl sold a litter of thoroughbred Scotch Collie pups for \$25 and gave that amount. The colored porter in the Elks' Lodge gave \$50, and a colored bootblack contributed \$50. There was not a church, a fraternal order nor social society that failed to give a liberal amount. As a result of the extraordinary efforts put forth this city is to be the terminus of the Kansas City, Missouri & Orient Railroad, with direct connections from here to Kansas City, and via the Chicago & Alton to Chicago; a trunk line from here to the City of Mexico, and a line from here to some point on the Gulf of Mexico, not yet determined, thought to be Corpus Christi. Actual construction work is to begin at this end of the road not later than July 1, and from present indications the graders will be busy by June 1. The road from San Angelo to Del Rio will likely be completed and in operation in about 18 months.

Because of the success of the city in getting this new railroad, prospectors and investors are flocking into town from every direction. All lines of business have increased during the past few months, and the year will surely be a most successful one for the entire section, for good rains have fallen and put the range in excellent condition, fat stock will be plentiful at high prices, and the construction of a new railroad, commencing in the heart of the summer, will inject into local commerce

an energy that cannot but override any other year in Del Rio's history.

To present some concrete evidence of the growth and prosperity of Del Rio I need but mention that the bank deposits of the city on March 29 this year, when a statement was called for by the Comptroller, showed a 40.5 per cent. gain over the same date one year ago.

Express receipts for the first quarter of 1910 over the same period of 1909 show an increase of 11.5 per cent.

The postal situation is very gratifying to those who are proud of the advancement of their home town. This office advances on July 1 from a third to a second class office, as a result of the annual report of the local postmaster for the year ending March 31, 1910. For the year thus ending the receipts show an increase over the same period one year ago of 14 per cent.; for the year ending March 31 over the same period five years ago a gain of 67 per cent. is reported. Another feature of the local postoffice is that Del Rio usually has a credit in the New York headquarters on money orders, viz., more money orders, both in number and amounts, are cashed in Del Rio than those issued from the local office.

Freight receipts for the town for the first quarter of this year over the first quarter of 1909 show a gain of 23 per cent.

Freight forwarded from Del Rio for the first three months of 1910 over the same period of 1909 show an increase of over 61 per cent. Ticket sales for the first quarter of the year show a 67 per cent. gain over the first quarter of 1909.

More real estate transfers have been recorded during the past 90 days than in any other similar period in the history of the city. More business property has passed hands since January 1 than in the entire preceding four years. A great deal of building is under way, and improvements and developments that one year ago were unthought of and not considered are today being made.

Those who have studied closely the situation here in regard to the growth of the city, and who have taken into consideration the splendid country surrounding the town, do not hesitate to predict a second El Paso and a city of probably the greatest importance from many standpoints along the entire Mexican border.

FRED I. MEYERS,  
Secretary.

### CHEAP FUEL.

25,000 in 1912 Club,

Bartlesville, Okla., April 23.

*Editor Manufacturers' Record:*

No less than six new business buildings and 50 residences are in course of construction here, and 90-odd blocks of paving are contracted for.

The Antler Hotel has just been completed, at a cost of \$50,000; the Johnstone Block, at a cost of \$100,000; two new brick blocks on 2d street just completed at a cost of \$60,000; a new hotel to be built at a cost of \$180,000; contracts have been let for a new city hall, to cost \$60,000; the new Elks' Home, to cost \$30,000, and a new rooming hotel, to cost \$30,000, besides many residences to be added to the already heavy building list.

The Osage & Western Railroad, which is to cross the State of Oklahoma east and west, is to have its trains running through Bartlesville this year, and will have its division point and railroad shops at this point.

The city offers exceptional economic conditions for manufacturing purposes in the manner of natural gas in inexhaustible quantities at three cents per 1000 feet for fuel purposes, an open and ready market



for the output of any industry, and excellent railroad facilities.

Anyone seeking an ideal location for a manufacturing industry of any character will find it to his advantage to correspond with the secretary of the 25,000 in 1912 Club.

GEO. T. WAKEFIELD,

Secretary.

#### BUILDING AT STAMFORD.

Commercial Club,  
Stamford, Tex., April 25.

*Editor Manufacturers' Record:*

The concrete foundation was laid the first of this week for the new two-story brick building to be erected by Judge Buie. This building will be fitted for occupancy by the Commercial Club on the lower floor, and the upper floor will be occupied by the Stamford Lodge of Knights of Pythias. The building will be 27½x100 feet. Adjoining this property on the west is an 82½-foot front belonging to City Marshal J. R. Cargill, and Mr. Cargill is clearing this property for the reception of three structures, the lower floor providing rooms for as many business houses, and the upper portion to contain 50 sleeping-rooms. Plans for these three buildings in one are now under way in the office of Architect S. B. Elliott.

During the week property-owners on West McHarg and also East McHarg and on North Swenson have been active, and as a result of several conferences they have signed up for paving West McHarg to the Texas Central crossing, East McHarg to the Wichita Valley crossing, and North Swenson for two or three blocks into the residence section. The new Council has passed an order for an election for bonds to pay for the city's one-third of this improvement. Material is also being placed on the ground for four brick buildings on North Swenson street. Late reports are to the effect that the property-owners on the north side of West McHarg, adjoining the Cargill property, have about gotten together for the building of a block of seven new brick buildings.

With all of these plans materialized there will be 14 brick buildings in course of construction at one time in Stamford, ranging in price from \$8000 to \$40,000. In addition to this, something like 40 new residences, ranging in price from \$1500 to \$5000, are in course of construction. The large brick building of the Stamford Produce Co., which is 150x54 feet, two stories high, is going up rapidly, and the lot owned by the Armour Packing Co. is being cleared, and it will only be a short time until a \$40,000 warehouse, depot and office building will be erected thereon.

Plans are also drawn for a \$30,000 building to be erected in the very near future, and other buildings are being planned.

The foundation for the \$50,000 Methodist Church has been completed, and the work on the building will begin immediately.

HOMER D. WADE,

Secretary.

#### WANTS MORE INDUSTRIES.

Chamber of Commerce,  
Greensboro, N. C., April 30.

*Editor Manufacturers' Record:*

On last Tuesday the taxpayers voted almost unanimously for a \$35,000 bond issue for schools, which money will be spent immediately in improving our school facilities, and with this additional money ample accommodations will be provided for our children by fall. We undertook to raise in a 10-day campaign \$65,000 for a Y. M. C. A. building, and raised over \$60,000 in seven days, thus breaking the records and fully demonstrating that our citizens are liberal and public-spirited, and possess that degree of earnestness and determination which spells success.

Our greatest need at the present is more manufacturing plants, and no matter how

small or how large, we have advantages which will appeal to anyone interested. We have a very large building which would be ideal for the manufacturing of automobiles, and the manufacturer who is wise enough to look into the South will find the people of the South ready customers for a good up-to-date Southern-manufactured machine.

C. C. McLEAN,

Secretary.

#### WILL OFFER BONUSES.

Industrial League,  
El Dorado, Ark., April 22.

*Editor Manufacturers' Record:*

At a mass-meeting of citizens held here a few days ago the El Dorado Industrial League was organized. It has applied for a charter. This organization has undertaken to raise \$100,000 to be used in advertising El Dorado and as cash bonuses to manufacturing plants locating here. Already \$60,000 have been subscribed, and the total amount will be forthcoming in the next few days. El Dorado has many advantages to offer manufacturers, and wants the world to know it.

F. H. KETTERING,

Secretary.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 94, 95, 96, and under "Cities, Towns and Railroads Inviting Factories" on pages 144, 145, 146 and 147.

#### WANT INFORMATION ABOUT THE SOUTH.

From letters of inquiry about the South received by the MANUFACTURERS' RECORD the following extracts are made in order that business organizations, railroads and others may get in communication with these people or send them literature about different communities:

V. E. Messinger, Glendale, Ariz., writes that he seeks information about the South.

G. W. Killough, 1203 Wallace street, Philadelphia, Pa., wants to know about clerical opportunities in the South, especially Texas.

M. A. Tremper, Birch Run, Mich., seeks information in regard to the climate and resources of the South. Especially desires information regarding sheep and stock-raising.

B. L. Chipman, 219 Leonard Place, Knoxville, Tenn., wants information in regard to a good location, especially in Western Maryland or Western or Southwestern Virginia, for a job printing business.

J. S. Bonebrake, postmaster, Montrose, Westmoreland county, Virginia, seeks information in regard to Florida and Eastern Texas, stating that a number of people in his locality desire to buy homes in these States.

Bert L. Chipman, 219 Leonard Place, Knoxville, Tenn., writes that the following-named persons are interested in information about the South: James I. Chipman, South Poland, Maine; John S. Briggs, Poland, Maine; R. E. Chipman, 77 Prospect street, Cambridge, Mass.; John H. Jordan, Guildhill, Vt., and Mrs. E. S. Cummings, Colebrook, N. H.

Walter M. Denn, 141 Woodland avenue, Coatesville, Pa., seeks information in regard to brick-manufacturing business in the South, or any other information showing opportunity for young man with some intelligence and some capital.

Harleigh Johnston, San Ysidro Ranch, Santa Barbara, Cal., wants information about the South.

Mr. Geo. P. Rowe, 513 North Paca street, Baltimore, Md., wants information about Virginia or Texas which will help him decide which one to go to.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

#### A Modern New England Textile Mill.

A few years ago the textile-mill industry of New England somewhat lagged behind in up-to-date equipment, but now that section is always keeping pace with modern ideas in new mill construction and equipment. This industry is steadily expanding in New England, and new mills of large capacities are continually being erected. One of the most interesting of these, from its size and modern character of equipment, is known as the Sagamore Mill No. 3, which is the third and largest of a series of mills located at Fall River, Mass., in the heart of the textile manufacturing center of New England. This structure is three stories high and 156x408 feet, with an addition 70x90 feet. In equipment it contains the most modern and improved machinery of the day, as well as the economic types of power and transmission equipment of the highest efficiency.

The Sagamore mill is illustrated and described at length in the April 15 issue of the *Phoenix*, which is a monthly house organ published by the New York Leather Belting Co., 51 Beckman street, New York city, for the purpose of disseminating technical knowledge about belting for transmission and conveying purposes, as well as to point out how to accomplish economic, improved belt transmission. In this article particular attention is given, both in the illustrations and descriptive matter, to the transmission equipment installed. It is pointed out that, so far as known, this is the only example of belt equipment in any mill in the United States where every belt, with a single exception of the little loom belts, has been installed in endless fashion. One particularly interesting photograph shows a view down an aisle between a line of 50 spinning frames. These are belted on what is known as a bicycle drive, and one belt 73 feet long, operates two spinning frames, one on either side of the aisle. Another interesting feature of the mill is the weaving-room, covering a single floor space of two and one-half acres, where 1250 looms are in operation. In this room no belting or line shafting is visible, this being an unique feature of its arrangement, the entire transmission arrangement being located in the basement just below the room. Various other features covering the equipment of this plant are also interestingly described.

#### The Cotton Movement.

In his report for April 29 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 241 days of the present season was 9,565,257 bales, a decrease under the same period last year of 2,963,638 bales. The exports, less 52,292 bales returned from abroad, were 5,231,408 bales, a decrease of 2,183,591 bales. The takings were, by Northern spinners, 1,812,898 bales, a decrease of 569,392 bales; by Southern spinners, 1,857,341 bales, a decrease of 61,971 bales.

#### The Hanes Yarn Mill.

The P. H. Hanes Knitting Co. of Winston-Salem, N. C., has engaged O. A. Robbins of Charlotte, N. C., as engineer for

the construction and equipment of its recently-announced yarn mill. This will include a one-story building about 500 feet long, with monitor roof, equipped with 10,000 spindles to produce yarns for consumption by the company's knitting machines. The company will increase its capital by \$250,000 in this connection.

#### The Meritas Mills.

The Meritas Mills of Columbus, Ga., will be organized by Alvin Hunsicker, general manager of Standard Oil Cloth, 320 Broadway, New York, and associates. This company will build a mill to manufacture the cloth basis for oilcloth, shipping the output to the Standard plant for finishing. It has not fully completed plans for the mill. The incorporation of this company with \$300,000 capital stock was reported last week.

#### A \$50,000 Hosiery Company.

Messrs. C. H. Bacon, manager of the Loudon Hosiery Mills, Loudon, Tenn., and J. M. Givens of New York plan the organization of a company with capital stock of \$50,000 to build a hosiery mill at Morristown, Tenn. They ask Morristown investors to subscribe to \$20,000 of stock and donate site for plant.

#### Textile Notes.

The Osage Manufacturing Co. of Bessemer City, N. C., is reported as to expend \$75,000 for additional carding machinery, looms, electrical motors, etc.

The Fulton Bag and Cotton Mills of Atlanta, Ga., will build an addition to bag department. This addition will be 60x100 feet, of brick mill construction, and cost \$100,000.

#### His View of Texas.

Mr. Powell Crosley of Cincinnati has recently returned from Texas, and in an interview in *The Enquirer* vents his enthusiasm thus:

"Texas, as you know, is by far the largest State in the Union, being equal in size to four of our largest States. It has within its borders all kinds of soil and climatic conditions, from the rigors of the North, in the territory adjoining Colorado, Kansas and Oklahoma, to semi-tropical, bordering on the Gulf of Mexico. It is said that Texas is so situated and has its climate and soil in such varied assortments that it could support an immense population, though fenced in from the rest of the world.

"It is a matter of statistics that some 2,500,000 to 3,000,000 of people have moved into Texas since the census of 1900, and that the population has increased about 75 per cent. In the last 10 years, mainly from the well-to-do people of the East, North and West. They have taken with them their money, thrift and enterprise, so that that wonderful State is making great strides in development.

"I found that no part of Texas is increasing in population faster, if so fast, as the Gulf coast country, that part bordering on the coast of the Gulf of Mexico, and especially that part known as the Houston-Galveston district. This district is the rain belt, having an annual rainfall, as shown by the weather reports of the last 17 years, of over 46 inches, while Cincinnati shows but 42 inches.

"Galveston is bravely endeavoring to recover from the disastrous tidal wave of a few years ago, having bonded itself heavily to construct the immense seawall which withstood the great wave of July last. This port in exports and imports is only exceeded by one city of the United States—New York."

The Florida Citrus Exchange handled up to April 23 nearly 1,500,000 boxes of fruit.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### TERMINALS AT BALTIMORE.

#### Several Railroads Contemplating Improvements Besides the Pennsylvania's New Depot.

Several plans to improve railroad terminals in Baltimore are contemplated in addition to the construction of a new station by the Pennsylvania Railroad, which is already under way. The Baltimore & Ohio Railroad is considering a plan to build a new downtown depot to take the place of Camden Station, that has been used for more than half a century. The company has long had in view the need for enlarging its facilities at Camden Station, where the pressure of freight business has encroached upon the space required for handling passenger traffic. It is now proposed to erect a new passenger station at the corner of Howard and Camden streets, immediately east of the present Camden Station. The site is already owned by the railroad company, which has had possession of it for a number of years; in fact, ever since the building of the belt line tunnel, which was completed about 15 years ago, and when it was proposed to establish a large passenger terminal at the intersection of Howard, Liberty and Lombard streets. Just how soon the construction of the new station will be undertaken is not decided, but it will doubtless come within the next year or two. In connection with this depot it is proposed to erect an overhead double-track line along the present right of way to a point well outside the city limits, this being for the purpose of operating trains at high speed through the city, thus avoiding delays on the surface line, where various crossings interfere. The erection of this elevated road in connection with some revision of line on the Washington branch would enable the Baltimore & Ohio to put on faster trains than the present 45-minute expresses now operated between Baltimore and Washington.

The Western Maryland Railroad Co. also has in view the improvement of its terminal facilities at Baltimore, which are not at present suitable for a road of its size and character. The principal terminal is still at Hillen Station, and the company is obliged to use for several miles the tracks of the Pennsylvania Railroad in order to reach it. But the Western Maryland has authority to build a line along Jones' Falls, a stream which bisects the city from north to south, and the company may build its own entrance by cutting across from its present line north of Walbrook Station, in the western part of the city, to the Jones' Falls valley, and following that stream to Hillen Station. It may also build the line long contemplated from Hillen Station on an elevated structure over the stream to the harbor, which would necessitate an extension of about one mile. The Western Maryland is furthermore considering the erection of an office building to accommodate its forces of officials and clerks. It has long outgrown the limited accommodations at Hillen Station, and is obliged to rent quarters downtown with the inconvenience that necessarily follows the separation of different departments. It appears probable that the company will be doing some new construction within the next year or two in order to relieve the situation.

The Washington, Baltimore & Annapolis Electric Railway, which has a double-track line from Baltimore to Washington and a branch to Annapolis, is building a freight terminal on Lombard street near Howard street.

The Maryland & Pennsylvania Railroad has also taken steps to improve its facilities, particularly with reference to handling freight, having obtained the right from the Legislature recently to build an extension from a point outside the city limits to a point on the eastern side of the harbor.

### New Equipment, Rails, Etc.

The Chicago, Rock Island & Pacific Railway is concluding arrangements for the purchase of a large amount of equipment as follows: Eighty-four consolidation locomotives and 50 Pacific locomotives from the American Locomotive Co., New York; 600 convertible ballast cars from the Rodger Ballast Car Co., Chicago; 825 steel-frame 40-foot box cars from the Western Steel Car & Foundry Co., Chicago; 800 steel-frame 40-foot box cars and 5 dining cars 70 feet 6 inches long from the Pullman Company, Chicago; 25 caboose cars 29 feet long from the Mt. Vernon Car Manufacturing Co., Mt. Vernon, Ill.; 50 refrigerator cars 40 feet long from the Milwaukee Car Manufacturing Co., Milwaukee, Wis.; 4 gasoline steel motor cars 70 feet long from the McKeen Motor Car Co., Omaha, Neb.; 1000 steel-frame 40-foot automobile and furniture cars, 500 steel-frame stock cars 36 feet 6½ inches long, 200 refrigerator cars 40 feet long, 10 steel baggage cars 66 feet long, 20 steel smoking cars 60 feet long, 20 steel compartment coaches 60 feet long, 6 steel passenger and baggage cars 70 feet long, 6 steel baggage and mail cars 70 feet long and 4 steel postal cars 60 feet long from the American Car & Foundry Co., St. Louis.

According to a market report, the Harriman lines are not expected to place orders for some time for about 300 locomotives and 5000 or 6000 freight cars because the equipment could not be received early enough to be available in the crop season. The company has ordered 424 passenger train cars from the Pullman Company.

The Norfolk & Western Railway has ordered 10 locomotives from the Baldwin Works, Philadelphia.

The St. Louis, Brownsville & Mexico Railway is reported to have ordered 2000 tons of 80-pound rails from the Pennsylvania Steel Co., Steelton, Pa.

The Wrightsville, Adrian & Lyons Railway Co. is in the market for two locomotives, two combination passenger and baggage cars and two passenger coaches. W. F. Staten is secretary at Adrian, Ga.

The locomotive order of the Santa Fe system, placed with the Baldwin Works, includes 23 Atlantic, 12 Pacific and 10 Mallet locomotives.

The Board of Control at Baton Rouge, La., is inviting bids to furnish 2½ or 3 miles of either relaying or new steel rails of 35 or 40 pounds weight. W. W. Heard is president.

The Kansas, Lawton & Gulf Railway will, it is reported, purchase 5 passenger cars, 10 flat cars and 10 box cars. It was recently stated that the Armour Construction Co., Kansas City, Mo., Frank Avery, president, would furnish equipment and material for this line. J. M. Bellamy of Lawton, Okla., is president of the railroad.

The Macon Railway & Light Co. of Macon, Ga., will, according to a press report, purchase eight pay-as-you-enter cars, and it will also remodel 33 cars into the pay-as-you-enter type.

The Baltimore & Ohio Railroad, it is reported, will purchase 120 passenger cars, besides other equipment.

The Pennsylvania Railroad has ordered 171 passenger cars, which will be built in about equal numbers by the American Car

& Foundry Co. of St. Louis, the Standard Steel Car Co. of Pittsburgh and the Pullman Company of Chicago. The Pennsylvania Company (lines west of Pittsburgh) has increased its order for steel passenger cars to 89, all of which will be built by the Standard Steel Car Co.

The Louisville, Henderson & St. Louis Railway, according to a dispatch, has ordered two 10-wheel locomotives from the Baldwin Works.

The Clarksville Railway & Light Co. of Clarksville, Tenn., has received three pay-as-you-enter summer cars from the American Car Co. of Danville, Ill.

The Valdosta, Moultrie & Western Railway has ordered a 10-wheel locomotive from the Baldwin Works.

The Newton Northwestern Railway of Newton, Miss., will be in the market for locomotives, cars, rails and other material. D. L. Ragland is president and chief engineer at Newton, Miss.

The Virginian Railway is reported to have ordered 1500 steel gondola cars and 500 steel hopper cars from the Pressed Steel Car Co. of Pittsburgh.

The Seaboard Air Line has, it is reported, ordered 1000 box cars and 25 steel underframe stock cars from the Pressed Steel Car Co.

### AFTER KENTUCKY COAL.

#### New Line Projected to Include Extension of an Existing Railroad.

A letter to the MANUFACTURERS' RECORD from Salyersville, Ky., says:

"The extension of the Eastern Kentucky Railroad from Webbville, Ky., to the great timber and coal fields in Breathitt county is assured. The officers of the company, who contemplate taking over the Eastern Kentucky road and making this extension of 69 miles, together with their chief engineer, are now going over the survey making some minor changes preparatory to advertising for contracts to grade the road. The road passes through Lawrence, Johnson and Magoffin counties, and will tap one of the richest undeveloped coal and timber fields in the United States. Work will begin on the extension in the early summer."

A press report says that the North & South Railroad Co., which is contemplating the construction of a line from Portsmouth, O., via Riverton & Grayson, Ky., to Webbville proposes to use the Eastern Kentucky Railroad for part of the distance, and will build an extension to Salyersville and Jackson, Ky. It is further reported that C. D. Warren and Capt. F. W. Fletcher of Toronto, Canada, have gone over the route of the proposed extension in company with Mr. Gibson, an engineer, from Jackson, Ky. The Eastern Kentucky line extends from Riverton, Ky., on the Ohio River, to Webbville, about 36 miles. Its extension as proposed would afford transportation facilities to a region now without railroads.

### Chesapeake & Ohio Plans Approved.

The stockholders of the Chesapeake & Ohio Railway have approved the financial plans of the directors for the acquisition of the Hocking Valley Railway, of a large interest in the Kanawha & Michigan Railway, and for the purchase of the Chicago, Cincinnati & Louisville Railroad, as heretofore proposed. The plan provides for an increase of the common stock from \$66,000,000 to \$100,000,000 and for the issue of \$37,200,000 of 4½ per cent. convertible bonds. The arrangements with respect to the Hocking Valley Railway and the Kanawha & Michigan Railway have been concluded, but the purchase of the Chicago, Cincinnati & Louisville Railroad is to be fulfilled after the proposed foreclosure sale. Some of the new securities will be

used to acquire new equipment for the Chesapeake & Ohio.

### Frisco's Yards at Harvard, Ark.

The St. Louis & San Francisco Railroad has completed its new freight yards at West Marion, Ark., and a report from Memphis says that they will be immediately put into use. The name of West Marion will be abandoned and the place will be known as Harvard. It is further stated that the company has built more than 100 houses for its employes, and will also erect a small hotel to accommodate others. An electric-light plant will be installed to illuminate the yards and buildings of the company, but it will also furnish light to the homes of employes. The other improvements include a roundhouse of 50 stalls and a machine shop to which additions may be made from time to time.

### Coal & Coke's Northern Extension.

Ashton A. Chapman is making a survey for a contemplated extension of the Coal & Coke Railway from Elkins, W. Va., northward for a distance of about 90 miles. A report that he was awarded a contract to build the line is denied by him. Press reports indicate that the extension will go from Elkins to Rowlesburg, connecting there with the Morgantown & Kingwood Railroad; also that a branch will be constructed from St. George to connect with the Dry Fork Railroad for Parsons, W. Va. It has been rumored that this extension, if constructed, would connect with a line to Pittsburg.

### Norfolk & Southern Reorganizing.

The Norfolk-Southern Railway Co. has been chartered with \$16,000,000 capital to operate the properties of the present Norfolk & Southern Railway Co. as soon as the necessary formalities to take the road out of the receivership are completed. The officers are: President, E. T. Lamb, Norfolk, Va.; vice-president, Frederick Hoff of New York; secretary, Morris S. Hawkins of Norfolk; assistant secretary, N. W. Runyon of New York; treasurer, Mathias Manly of Norfolk.

### \$3,000,000 Bonds Sold Abroad.

William Kenefick, president of the Missouri, Oklahoma & Gulf Railroad, which is building from Muskogee, Okla., to Denison, Tex., is reported to have announced at Kansas City that \$3,000,000 of bonds of the line have been sold in Paris, France.

### Railroad Notes.

The Southern Railway has completed its new boiler shop at Coster, near Knoxville, Tenn.

A dispatch from Atlanta, Tex., says that the Texas, Arkansas & Louisiana Railway proposes to use natural gas for fuel on a locomotive, and it has obtained a car carrying a tank in which the gas will be stored and from which the fuel will be fed to the engine.

Mr. T. H. McDannel has been appointed general immigration agent of the Ocean Steamship Co. of Savannah, with office at Ellis Island, Immigrant Station, New York, and at Pier 35, North River, New York.

A dispatch from Carthage, Mo., says that the construction of an interurban railway from there to Springfield, Mo., is assured, nearly all the stock having been subscribed and an order has been placed for 45 miles of 80-pound steel rails. Gasoline motor cars of a high-speed pattern will be operated.

The Board of Trade of Clarksville, Ga., is circulating an attractive pamphlet telling of the advantages of that community and of Habersham county.



**GOOD ROADS****WEEK'S HIGHWAY RECORD.**

**Progress in Southern Road and Street Improvement.**

[Full details of highway undertakings are given in the Construction Department.]

**Bonds Voted.**

Betterton, Md.—City voted bonds to construct concrete sidewalks.

Washington, Va.—Wakefield district of Rappahannock county voted bonds for \$15,000 to construct seven-mile macadamized road.

**Bonds to Be Voted.**

Lexington, Ky.—City contemplates voting on issuing \$300,000 of bonds for street improvements.

May Pearl, Tex.—Ellis County Commissioners contemplate ordering election on \$25,000 of bonds for road improvements.

San Marcos, Tex.—Hays county votes June 4 on issuing \$20,000 of bonds for road construction.

Stamford, Tex.—City contemplates bond election for road and street improvements.

Waxahachie, Tex.—Ellis county votes June 4 on issuing \$300,000 of bonds for road improvements.

**Contracts Awarded.**

Attalla, Ala.—City awarded contract at about \$8900 for constructing 5100 square yards of artificial stone sidewalk, 100 yards of driveway and 7800 feet of combined curb and gutter.

Clarksville, Tenn.—W. J. Manning & Son have contract to lay 20,000 square feet of sidewalk.

Richmond, Va.—City awarded contract for asphalt block paving on four streets surrounding school.

**Contracts to Be Awarded.**

Agricultural College, Miss.—Executive committee A. and M. College opens bids May 17 for constructing 1½ miles macadam road.

Dallas, Tex.—City opens bids May 9 for paving Elm street.

Dallas, Tex.—City opens bids May 9 for paving Commerce street.

El Paso, Tex.—City opens bids May 5 for paving.

Federalburg, Md.—Caroline County Commissioners open bids May 10 for paving and macadamizing .61 mile road.

Houston, Tex.—Harris County Commissioners open bids May 13 for paving four miles of road and for paving on another road.

Laurinburg, N. C.—City opens bids May 23 for laying about 2500 square yards of concrete sidewalk paving, with curbs and gutters.

Little Rock, Ark.—City opens bids May 4 for grading and laying concrete sidewalks and crossings.

Little Rock, Ark.—City opens bids May 14 for asphalt paving.

Luray, Va.—New Market and Sperryville Turnpike Co. contemplates improving road and constructing one mile of macadam road as object-lessons.

Lynchburg, Va.—State Highway Commissioner opens bids May 10 for constructing 1.6 miles of macadam road.

Macon, Ga.—City decided on paving various streets with wooden blocks, asphalt, bitulithic with vitrified brick in center of street-car tracks, granite block, vitrified block, vitrified brick, etc.

Memphis, Tenn.—City opened bids April 26 for 111,731 square yards of tar-macadam pavement, 980 square yards of gravel pavement and 271,610 square yards of concrete gutters.

Memphis, Tenn.—City will pave Rabbourn Boulevard with bitulithic.

Oklahoma City, Okla.—City opens bids May 16 for eight miles of street paving.

Port Arthur, Tex.—City contemplates construction of concrete sidewalks.

Portsmouth, Va.—City will expend \$125,000 this year for street improvements.

Spartanburg, S. C.—Spartanburg county will construct 36-mile road.

Spottsylvania, Va.—Board of Public Roads opens bids May 18 for constructing 14 miles of gravel road in Chancellor district, 19 miles in Courtland district and three-quarters mile of macadam road in latter district.

Wichita Falls, Tex.—City expects to award \$40,000 contract in connection with street improvements.

**LUMBER**

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

**Will Develop 1000 Acres.**

Regarding its recent purchase of 1000 acres of timber land in Charlotte and Campbell counties, Virginia, the Ward Lumber Co. of Lynchburg advises the MANUFACTURERS' RECORD that the tract is estimated to cut about 2,000,000 feet of original growth oak and poplar and 2,000,000 feet of yellow pine timber. The company is preparing to develop the property, and has installed two circular mills of 20,000 feet daily capacity for this purpose. The land is located on the Virginian and Norfolk & Western railroads, and involved an expenditure of \$20,000 for its purchase. M. L. Booth of Brookneal, Va., is the manager in charge of operations.

**For Railroad Ties.**

In connection with its recent purchase of timber land in Tennessee the Ayer & Lord Tie Co., Railway Exchange Building, Chicago, informs the MANUFACTURERS' RECORD that it does not intend to develop the property other than for railroad cross-ties. It is not probable that the company will install any mills, except that it may contract with a few portable mills for sawing ties. This is one of numerous tracts which the company owns for similar development.

**Sawmill for Newton, Miss.**

A dispatch from Newton, Miss., states that the Newton Lumber & Manufacturing Co. has ordered equipment and is making active preparations for the erection of a band-saw mill of 35,000 feet daily capacity. The company is at present operating a planing mill and woodworking plant, and has under construction a large drykiln. Its proposed sawmill will be put in operation as soon as possible.

**To Develop 8000 Acres.**

A report from Prescott, Ark., states that the Prescott Land & Timber Co., recently organized with a capital stock of \$50,000, has purchased 8000 acres of timber land in Clark county, and will establish a large sawmill to facilitate its development. Officers of the company are Nat Martin, president; M. L. Moore, vice-president; John A. Davis, secretary and treasurer, and B. B. Young, manager.

**Lumber Notes.**

The Gillespie Lumber Co. of Jacksonville, Fla., will incorporate with a capital stock of \$50,000 to deal in lumber and other wood products. Its officers are D. L. Gillespie, president; Pittsburg, Pa.; E. I. Burdett, secretary, and E. L. Wolff, treasurer.

The Fleming Brothers Lumber & Manufacturing Co. of Garland, N. C., has incorporated with a capital stock of \$100,000. Its incorporators are George W. Fleming, Garland; Clarence D. Fleming, Pocomoke City, Md.; Berton S. Reese, Allentown, Pa., and William M. Fleming, Scranton, Pa.

**MINING****The Asher Coal Mining Co.**

The MANUFACTURERS' RECORD has received authentic information regarding the plans of the Asher Coal Mining Co. of Wasioto, Ky., which has incorporated with a capital stock of \$350,000. The company has leased three tracts of coal lands from T. J. Asher of Wasioto, and is making active preparations for the installation of equipment to facilitate development. One tract is located on Crane Creek, and contains about 5000 acres, while another of 2000 acres is located on the Cumberland River, and one of 7000 acres on Toms Creek. It is intended to install equipment at mine No. 2, involving an expenditure of about \$150,000, and begin shipping from this mine within 30 days. Work on a mine at Toms Creek has also begun. The equipment already purchased consists of one 500-kilowatt alternating-current generator, steam turbine, boilers, incline shaker screens, etc. The power-house will be located at No. 2 mine, and is intended to carry current to the other two. Its generating capacity will be about 10,000 volts. It is stated that the coal to be worked is known as the Hance vein, 60 inches thick, with sand rock top and bottom, and is clean and non-coking. Among the incorporators of the Asher Coal Mining Co. are T. J. Asher, H. H. Asher, Robert Asher, G. M. Asher, A. J. Asher, Jr., and M. Brandenburg, all of Wasioto, and William Low of Pineville, Ky.

**With \$1,000,000 Capital Stock.**

Incorporating with a capital stock of \$1,000,000, it is understood that the Hutchinson Coal Co., general offices Fairmont, W. Va., has effected a consolidation of extensive coal interests in West Virginia and Ohio. These properties are said to include those of the Hutchinson Fuel & Supply Co. at Mt. Clare, W. Va., consisting of 1000 acres of coal lands and a large mining plant; Meadowbrook Coal & Coke Co., Erie, W. Va., mining plant and 500 acres of coal land; Moore's Run Coal Co., plant and 300 acres of coal land near Wheeling, and the Mason City Coal Mining Co., 300 acres of coal land in Mason county and mining plant near Wolf City. Among the incorporators of the Hutchinson Coal Co. are M. L. Hutchinson, C. E. Hutchinson and C. H. Jenkins, all of Fairmont, and V. L. Highland and C. S. Denham of Clarksburg.

**A Kentucky Development.**

An important coal and timber development in Kentucky will be undertaken by the Greasy Fork Coal & Timber Co. of Louisville, which has incorporated with a capital stock of \$250,000. Details have not been announced as to its plans, but it is stated that the company will purchase and develop extensive coal and timber lands in Harlan, Letcher and Leslie counties, beginning operations at once. Its incorporators are John G. White of Winchester; R. Carnahan, A. V. Thompson, Thomas R. Gordon and A. S. Rice, all of Louisville.

**West Virginia's Coal Production.**

Statistics prepared by the State Department of Mines of West Virginia for each of the 12 mining districts of the State show a total coal production for 1909 amounting to 44,383,735 tons and shipments amounting to 39,816,597 tons. The coke production for the year amounted to 3,439,098 tons.

**Mining Notes.**

Organization of the Choctaw Coal Co. of Wilburton, Okla., has been effected with a capital stock of \$350,000 to develop the

W. I. Thomason tract of coal and fruit lands near Wilburton, comprising about 3480 acres.

The Southern Appalachian Coal Operators' Association held a meeting at Knoxville last week for the purpose of discussing subjects of interest to its members. The next meeting, it is announced, will be held at Knoxville on May 23.

**FOREIGN NEEDS**

**Machinery and equipment wanted** abroad are mentioned in many letters received by the MANUFACTURERS' RECORD, which is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. For the benefit of our subscribers seeking foreign trade we publish the following extracts from recent letters:

**Wants Drums for Oil.**

Eug. Reynaud & Co., Newchang, Manchuria, China, writes the MANUFACTURERS' RECORD:

"We are exporters for bean oil. The present packing used is second-hand American kerosene oil tins with wood case, containing two tins. The cost price of this packing is very dear, because it requires 35 cases and 70 tins for one ton of oil. Also we have much trouble in soldering the tins, and we have less in weight on arrival in Europe. We hope you will investigate for the best and most economical method for packing the oil for shipment. We think iron drums from America would be the best to use if sent here in iron sheets not made up in drums; the freight for cubic tons would be too expensive. The drums could be put together here. To make it here we would require the following material: 1. Large iron sheets with gap for bunghole and lock screw. 2. Round iron sheets for the end. 3. Iron bands or hoops to hoop. 4. Some rivets. 5. Machinery. Can you give us the name of a good drum manufacturer, located, if possible, near New York, to facilitate the shipment to China and in position to supply us the different parts to enable us to put them together easily?"

**For American Manufacturers.**

Nicolas Georgiades, Constantinople, Turkey, writes the MANUFACTURERS' RECORD:

"I should appreciate it if you would give the addresses of some leading firms in woolen imitations of Astrakan, metal cables, wire files, hardware of all kinds, iron and metals in general; also a few makers of firearms, revolvers, etc. I would thank you very much for a detail list of leading manufacturing exporters of alimentary fats and, if possible, some new addresses for cottonseed oils and black and colored box-calf specially for men's slippers. You would place me under particular obligations if you could get me into communication with buyers of Turkish leaf tobacco or by furnishing me with a list of the principal buyers. Our tobacco is exported in very great quantities, and I am most favorably situated to deliver the various brands, Canalla, Xanthie, Drama, etc. I can send your wholesale buyers, upon request, samples, prices and full information as to terms."

**Wanted for South America.**

W. O. Smith & Co., F23 Produce Exchange, New York city, write the MANUFACTURERS' RECORD:

"A large firm in South America asks us to send catalogues and prices of machines for making floor tiles, heaters to burn kerosene oil, portable houses of canvass to be used as army hospitals, samples and prices of metal and shoe polishes, cleaning stuffs, toilet articles and drugs, wire to reinforce concrete buildings and metal ceilings."

**MECHANICAL****Wiley & Russell Machinery.**

Purchasers of machinery for factories, mills and shops will find their attention attracted to the two accompanying illustrations of "Green River" opening die-bolt cutter, nut tapper, pipe threader and cutting-off machines Nos. 50 and 55. These machines are manufactured by the Wiley & Russell Manufacturing Co. of Greenfield, Mass. This company says:

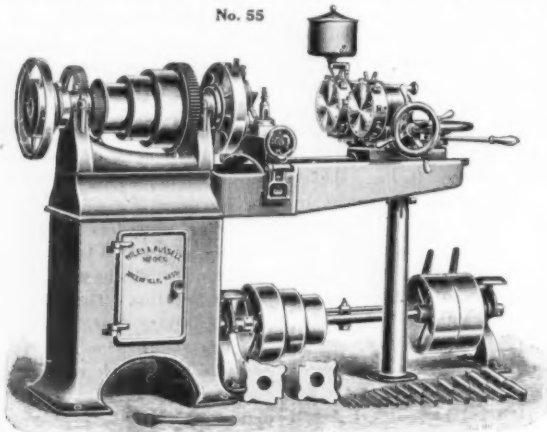
"The Green River machine has the very great advantage of opening dies which do not need to be adjusted, but stand always ready for work, and instantly release the

brought into position by turning the disks to the proper places, thereby making it possible to thread a lot of bolts of different sizes almost as quickly as if all were of the same size. Each die cuts a full thread at one operation, and the hollow spindle allows a screw of any desired length to be cut.

"The chuck is a very complete one, the jaws being made of tool steel, hardened and tempered, having interlocking jaws, to enable iron, large or small, to be properly grasped, thereby keeping the jaws sharp and in good order.

"The capacity of this machine is for bolts, nuts or pipe one-quarter to two

No. 55



WILEY &amp; RUSSELL MACHINERY.

bolt when threaded, without running back over the screw, thereby saving nearly half the time, and also saving much wear on the dies. By simply turning the hand wheel the dies separate, and the work can be taken out.

"We know of no machine which can approach it for quickness and convenience in threading bolts or pipe of a variety of sizes. You can change from one size die to another in less than one minute's time. It is very simple and strong, so that workmen of ordinary skill can use it with good results, and without the danger of breaking. We cannot recommend it too highly to anyone in need of a perfect bolt cutter,

inches. It has four changes of speed; has hollow spindles; hole through spindles two and one-half inches; takes three-and-one-half-inch belt; has oil reservoir."

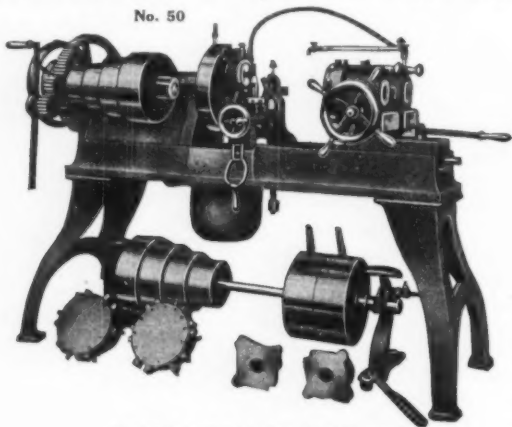
It may be added that the carriage now has a hand wheel in place of the lever illustrated.

The No. 55 machine may be described as is No. 50, with the following changes:

"The chuck is a very complete one, the jaws being made of tool steel, hardened and tempered, and are interlocking to enable iron, large or small, to be properly grasped.

"The capacity of this machine is for bolts, nuts or pipe one-quarter to two

No. 50



WILEY &amp; RUSSELL MACHINERY.

nut tapper, pipe threader and cutting-off machine.

"The dies (as many as 10 different sizes in assortment No. 1) are secured in two equal disks set side by side, and brought together or separated by a right and left screw, each die being divided, the half in one disk opposite to the half in the other, in such a manner that complete working die is made by bringing the wheels together to the stops, and the finished screw released by separating them, thus saving running back over the threads. Each die has independent stop pins controlling its cut, which are readily shortened or lengthened, enabling a perfect adjustment to be maintained, all the different dies standing ready for use, so that any size may at once be

inches. It is powerfully back-geared; has six changes of speed, which are obtained by throwing gears in and out, as in an engine lathe, thus making it possible to get suitable speed or power, as the nature of the work may require. It has hollow spindle; hole through spindle two and one-half inches; takes three-and-one-half-inch belt.

"Oil tank and cock for oiling work supplied without extra charge when oil pump is not ordered."

**"American" Steel Split Pulley.**

Wherever pulleys are needed, purchasers of this class of supplies will find it advisable to investigate the offerings of the American Pulley Co. of Philadelphia.

This company manufactures the "American" steel split pulley, made with either straight or crowning faces, and patented in the United States and foreign countries. (See accompanying illustration.)

Describing its pulley, the company says:

"Attention is called to the mechanical construction of the 'American' pulley, which admits of a light rim of one ply made exceedingly stiff by interior flanges to which the arms are attached, and by heavy rolled beads at the edges of the face. The arms, which are of patented construction, are flat, with their narrow edges cutting the atmosphere, and they converge from near the extremities of the hub to the central flange of the rim, so as to make an 'A' frame of great strength. On the larger sizes of 'American' pulleys the arms are strengthened at the bend near the hub shell by being thickened at that point. These flat arms are corrugated to give them stiffness. It will be seen by studying the construction of the pulley that it would be difficult to arrive at another design as well calculated to give the maximum strength with the least weight of material.

"'American' pulleys are guaranteed for double-belt service. They are competent for any duty not so severe as to demand a special pulley. Any pulley failing within one year in ordinary service is replaced. A record kept for a number of years shows that only two pulleys in 1000 have been complained of for any cause.

"The weights of different sizes of 'American' pulleys, compared with the weights of cast-iron pulleys or ordinary wrought-iron pulleys, show that the 'American' steel pulleys weigh a little more than half as much, size for size. This is, of course, an

**"AMERICAN" STEEL SPLIT PULLEY.**

advantage for freighting, and the lightness of the pulleys means a saving in the power required to drive the shafting that carries them.

"'American' pulleys are safe at high speed, and they cannot burst destructively.

"The makers of the best cast-iron pulleys do not advise for their products a higher peripheral speed than 88 feet per second. From tests made by us it would appear as below that 'American' steel pulleys can be recommended for a peripheral speed of 130 feet a second.

"A 36x10-inch 'American' pulley was run 192 feet per second, with a slight bending only in the rim clamp bolts; a 34x12-inch was run at 141 feet per second with no sign of distress. A 20x10-inch was run 137 feet per second without any indication of injury.

"A 36x12-inch pulley has been tested to 900 revolutions per minute without appreciably deforming the pulley.

"Tests made to determine the ability of the 'American' all-wrought-steel pulleys to transmit horse-power have shown that they will transmit any load recommended for cast-iron pulleys (not special) of the best make. As, for instance, a 30x8x3 7-16-inch bore 'American' pulley transmitted 44.6 horse-power at a speed of 1.222 feet per minute. Double eight-inch belts of the best quality are recommended for the transmission of 20 horse-power only at this speed.

"The fact that 'American' pulleys are parting pulleys makes them readily applicable to a shaft, without taking the shaft

down; that they are used with interchangeable bushings enables them to be applied to shafts of different diameters.

"It is not necessary to use keyseats or setscrews to hold these pulleys to the shaft. The hub clamps are of steel, and of such construction that they grip the shaft closely with enough power to prevent the pulley from slipping when the maximum traction is put upon the belt. Tests have shown that a 30x8-inch 'American' pulley will stand a pull upon the belt of 215 pounds per inch of width. This is about twice the traction ordinarily used.

"Our pulleys have been on the market for over eight years, and probably 30,000 of them were in use in 1898, and each year has seen an increased quantity put into service until the shipments from our factory are now ten times what they were eight years ago. We must have a million pulleys in use, and we have yet to hear of pulleys that are worn out except in the following cases:

"First—Where pulleys have been used in dyehouses or similar places where they were subjected to acid fumes.

"Second—Where they have been ground through by grit from pulverizing machinery or conveyors carrying pulverized stone.

"Third—In some instances where pulleys have been subjected to heavy duty the arms have broken near the hub, or the rivets joining the arms to the flanges of the rim have given way. By keeping careful notes concerning the sizes of broken pulleys and where they gave way, we have been able to select certain sizes which we considered it good policy to reinforce. Of course, the larger the pulley and the wider the face the more need for reinforcement. In late years there has been a marked diminution in the number of pulleys complained of for any cause—in 1900—1.13 in every 1000 pulleys.

"'American' pulleys are inspected before they leave the factory by men especially trained for this work, and who have become expert at it. Every pulley not coming within the necessary limit of truth is rejected. The 'American' pulley is as true as a pulley can be that is made in dies and not turned up on a lathe. The fact that all the parts are made in dies, and are interchangeable and symmetrically placed, ensures balance.

"Our maximum diameter was 48 inches, but we have supplemented same with a new range of diameters from 50 to 60 inches, inclusive, and have added some smaller diameters in the sizes under 48 inches. These new pulleys in the larger sizes are strengthened by having eight arms instead of the usual six, and embody all the leading mechanical features which have made our specialty so well liked in all directions. Our pulley is the only one which has the groove in the face center allowing for space of air from underneath the belt, thus increasing the tractive power of the latter by a large percentage."

**Storage Batteries at Gary Steel Plant.**

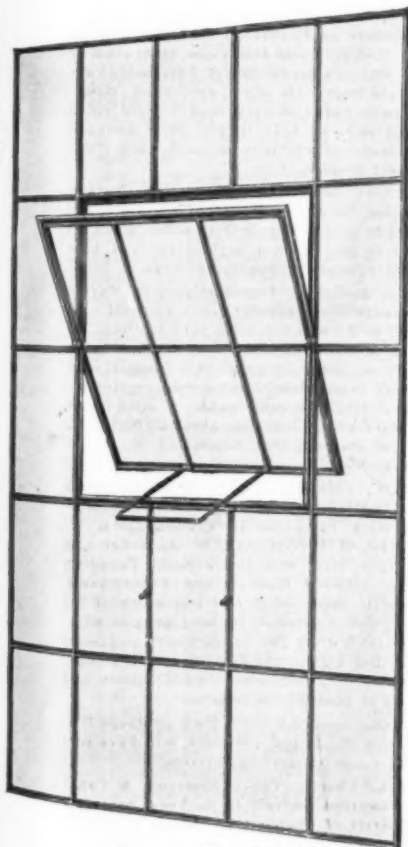
In construction of the Gary works of the Indiana Steel Co. (subsidiary corporation of the United States Steel Corporation) it is acknowledged that this plant represents the most modern ideas in steel works construction. The rail mill has a daily capacity of 4000 tons of finished rails, and it is said to be the only electrically-driven mill in the world. On account of the fluctuating load of the mill, which varies from 4400 to 19,100 horse-power, with an average of 12,025 horse-power, it is interesting to note how these fluctuations on the generating station are minimized. For this purpose a storage battery equipment was installed, and it has been found since the plant has been in operation that many advantages have been de-



rived from the battery which were not expected. The battery proper consists of two series of "chloride accumulator" cells, each series containing 125 cells, and the capacity of each is 4320 amperes at the one-hour rate, or 8640 amperes at the usual regulating rate. The practical commercial results obtained from the storage battery in actual operation have demonstrated that the regulation of both the alternating current and direct current loads makes the parallel operation of large gas engine driven alternators under fluctuating load conditions entirely practicable. An interesting feature is the marked effect of the battery regulation on the gas engine driven alternators in the South Chicago plant of the Illinois Steel Co., about 11 miles from Gary. When for any reason the battery at Gary is discontinued or the tie line between the power stations is opened, a decided difference is noticed in the operation of the South Chicago engines. Another feature that has been noted is the increased speed at which the large rail mill can be operated. If for any reason the battery is disconnected, the output of the rail mill is materially reduced. The emergency feature of the battery is also a most valuable one, as it enables the most important portion of the load to be carried uninterruptedly through times of interruption of service, which of necessity will occur in plants of large magnitude. As it is of vital necessity that the service in steel mills shall be continuous, the value of the battery in overcoming delays can hardly be estimated. This storage battery equipment was installed by the Electric Storage Battery Co. of Philadelphia.

#### The "United" Steel Sash.

Architects, building contractors and others interested in improved building materials will find their attention attracted by the five accompanying views of the "United" steel sash. This sash is made of the highest grade rolled steel sections, espe-



THE UNITED STEEL SASH.

cially designed to give the greatest strength and maximum light area.

The frame is so built that the full section of the steel is developed at all points. There is no weakening of frame by cutting

out the metal at the joints or by holes of any kind.

The sash has an attractive and finished appearance.

The special ventilator frame has two continuous contact surfaces for keeping out drafts and rain. A special improved locking device insures absolute tightness all around openings.

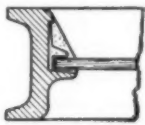


DOUBLE CONTACT AGAINST RAIN, ETC.

The glass is held firmly in place by special spring-steel clips, doing away with the old troublesome method of fastening with iron pins.

A continuous ledge extending along the entire length of the steel section prevents the putty from working loose or cracking away.

The sash is so designed that all joints and openings are thoroughly weather-proofed against drafts and rain. It has

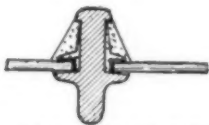


CHANNEL FRAME AROUND OUTSIDE.

rigidity, maximum lighting area and weatherproofness.

Standard frames are made for either 10x16-inch or 12x18-inch glass, in units up to five lights in width and any desired number of lights in height. Where openings are of greater width, several units are combined together by steel mullions. In this way practically every sized opening can be accommodated.

The Trussed Concrete Steel Co. of Detroit, Mich., manufactures the "United"



VERTICAL RIBS OF SASH.

steel sash, and summarizes its advantages as follows:

"1. Rigidity.—Made from deep sections of highest grade rolled steel. No weakening of frame by cutting out or punching of sections at joints or elsewhere.

"2. Lighting.—Maximum area of lighting is secured by using a deep and narrow steel section, offering minimum obstruction to light.

"3. Weatherproofness.—The perfect fitting joints, double-contact surfaces around



CROSS RIBS.

ventilator and special locking device effectively shut out draft and rain.

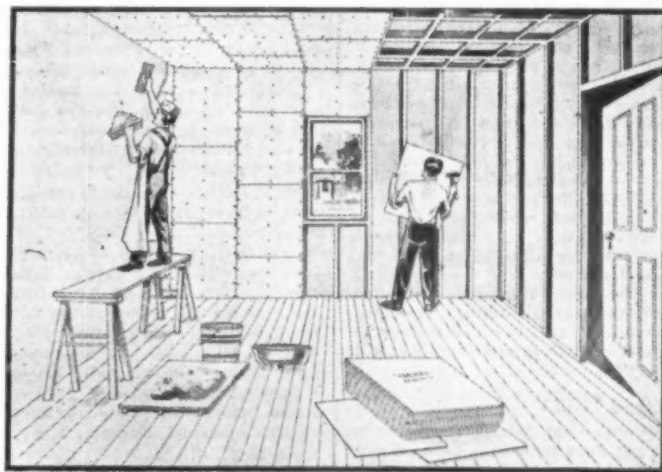
"4. Workmanship.—Being machine built, absolute accuracy and uniform finish is assured. Especially attractive in finished appearance.

"5. Economy.—The 'United' steel sash cost but little, if any, more than wooden frame. Fireproof and permanent. Cannot burn or rot."

#### The "Hercules" Plaster Board.

A fire-resisting substitute for lath and plaster, and which can also be used in the

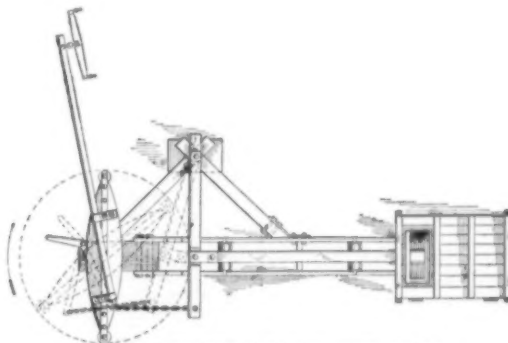
place of lumber as a sheathing under weatherboards, is being introduced by the Plaster Products Co., Hampton, Va. It is known as the "Hercules" plaster board, and may be used for a variety of purposes. For high-class work the company states that the most satisfactory result is obtained by first applying one-quarter to three-eighths inch brown coat of any good brand of hard wall or wood-fibered plaster over the "Hercules" plaster board, and after



PLACING "HERCULES" PLASTER BOARDS.

this is thoroughly set top off with a thin coat of finishing plaster. For summer cottages, bungalows or temporary constructions the company claims "Hercules" can be used without plaster by simply pasting wallpaper directly over the board. When used in this way it is suggested that the seams or joints be pointed up with plaster, in order to make a smooth surface. For repair work the plaster board can be nailed directly on the old lath and finished with a thin white coat after the cracked and broken plaster has been removed. For fireproofing purposes the plaster board is nailed solid to wooden or exposed surfaces. The claim is made that the use of this plaster board results in a great saving of time, labor and plaster, and that it renders houses cooler in summer and warmer in winter, as it is claimed to be impervious to heat or cold. At the same time it is said to be a non-conductor of sound, will not shrink or buckle, is light in weight and flexible. The boards are 32x36 inches in size, and are therefore specially adapted for nailing directly to studding placed 16 inches on centers. The company suggests

indicated by the arrow. As the beam is rotated the rollers on the end first bear on the adjacent side of the oscillating lever. After the roller is moved from the engagement with the lever the roller depending from the lower face of the rotatable beam will engage with the short side of the steel arm, which will be noticed projecting, and as the beam rotates this side of the arm will be moved rearwardly, while its opposite side will be moved forwardly, whereby the plunger, through the chain, lever and plunger rod, will be drawn outwardly from the casing or cylinder. As the beam continues to rotate the roller will move into engagement with the lever, whereby the latter will be forced toward the cylinder or casing, moving with it the plunger rod and arm, so that the hay within the casing or cylinder will be compressed and at the same time the arm positioned to be engaged by the roller at the opposite end of the beam. With this construction it is evident



"BELLE OF MISSISSIPPI" HAY PRESS.

that one-and-one-quarter-inch wire nails with large heads be used, spacing the nails four to six inches apart.

See accompanying illustration.

#### "Belle of Mississippi" Hay Press.

People interested in hay presses are invited to note the accompanying illustration of the "Belle of Mississippi" press, the machine being the invention of F. W. Ehman of Silver Creek, Miss., and now owned and manufactured by Mr. Ehman and Thomas

that at each half-revolution of the beam the plunger will be reciprocated, and it is evident that the operation of pressing hay will be greatly facilitated and the time ordinarily required to form a bale reduced to a minimum. The device is exceedingly simple in construction and comparatively inexpensive of manufacture, embodying few parts, and these so arranged that the danger of derangement will be reduced to a minimum. The machine will press from 16 to 20 bales per hour, and can be easily loaded on a one-horse wagon."

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers' Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers' Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

## BRIDGES, CULVERTS, VIADUCTS

Ark., Pocahontas.—St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo., will construct steel drawbridge over Black River; channel span 280 feet long; estimated cost, \$100,000; work by company's forces.

Ga., Wrightsville.—Wrightsville, Adrain & Lyons Railway Co., W. F. Staten, secretary, Adrain, Ga., will erect two pile bridges; one 800 feet and the other 1000 feet long. (See "Machinery Wanted.")

Ky., Clinton.—Hickman county contemplates construction of steel bridges. Address County Commissioners.

Ky., Lexington.—Empire Bridge Co. Incorporated with \$2000 capital stock by George Collins and others.

La., Leesville.—Ward 1 of Vernon parish voted tax for bridge and road construction. Address Police Jury.

Ky., Louisville.—Chesapeake & Ohio Railway, F. I. Cabell, engineer, Richmond, Va., is considering proposals for erection of railroad viaduct in East Louisville; length, 1500 feet; height at Clay and 20th Sts., about 22 feet; estimated cost \$100,000.

Ky., Salyersville.—Champion Bridge Co., Wilmington, O., has been awarded contract for erection of two steel bridges in Magoffin county; construction of piers commenced.

La., Shreveport.—City and Bossier parish will open bids May 10 (deferred date) for construction of recently-mentioned bridge over Red River; estimated cost \$300,000; Ira G. Hedrick, 1118 McGee St., Kansas City, Mo., is consulting engineer; C. G. Reeves, Comptroller. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will construct dam, spillway, corewall and concrete bridges in North East Park; bids to be opened May 9; R. E. Brownell, chief engineer of Park Commissioners. (See "Machinery Wanted.")

S. C., Anderson.—Greenville, Spartanburg & Anderson Railway, W. J. Thackston, president, will construct bridge across Cubbard's Creek on interurban railway between Anderson and Belton; bids invited. (See "Machinery Wanted.")

S. C., Rock Hill.—City will construct bridge across Catawba River; \$9000 available; J. T. Roddy, Mayor.

Tenn., Bartlett.—Shelby county will construct 60-foot steel span and two 20-foot approach spans over creek at Bartlett; St. George Richardson, County Engineer, Memphis, Tenn. (See "Machinery Wanted.")

Tex., Batesville.—Zavala County Commissioners will be ready to receive bids in June or July for construction of 8 or 10 steel bridges. (\$20,000 bond issue recently noted voted for roads and bridges.)

Tex., Dallas.—Dallas county awarded contract to Austin Bros. of Dallas to construct Miller's Ferry bridge; cost \$93,000.

Tex., Denison.—City will construct culvert with concrete top across Nelson St.; bids to be opened May 7; J. D. Yocom, City Secretary. (See "Machinery Wanted.")

Tex., La Porte.—Houston & Bay Shore Traction Co., J. G. Miller, engineer, Houston, Tex., will construct steel overhead bridge over Southern Pacific Railway tracks at West La Porte; span will be 75 feet wide, 23 feet above tracks, and will weigh 84,000 pounds; 140-foot approach on either side; cost \$14,500. (See "Electric Light and Power Plants.")

Va., Luray.—New Market & Sperryville Turnpike Co. (Clifford G. Bailey and others) awarded contract to Southern Construction Co., Birmingham, Ala., for construction of bridge over Pass Run.

Va., Matoaca.—Chesterfield County Supervisors, Chesterfield, Va., are considering construction of steel bridge over Appomattox River to connect Matoaca with Ferndale Park, on Dinwiddie county side.

W. Va., Clarksburg.—Clarksburg & Weston Electric Railway Co., S. L. Watson, president, Fairmont, W. Va., will construct five bridges.

W. Va., Fairmont.—Fairmont & Northern Traction Co., S. L. Watson, president, will construct five concrete and two steel bridges.

W. Va., Fairmont.—City will vote May 21 on \$75,000 bond issue for construction of bridge and for repairs and changes to water works system; R. G. Martin, Mayor.

W. Va., Wellsburg.—Pennsylvania Railroad, Alex. C. Shand, chief engineer, Broad Street Station, Philadelphia, Pa., contemplates construction of bridge over Bethany pike.

## CANNING AND PACKING PLANTS

Ala., Dothan.—Houston Canning & Refining Co., F. I. Mullen, manager, will establish plant to can tomatoes, sweet potatoes, okra, etc.; purchased machinery; will erect \$790 30x60-foot frame building.

Md., Frederick.—Frederick City Abattoir Co. will establish meat-packing plant. (See "Miscellaneous Enterprises.")

S. C., Cheraw.—J. P. Swett will establish cannery.

Tex., Beaumont.—V. Wiess awarded contract to M. A. McKnight & Co., Beaumont, for rebuilding structure recently noted; 55x80 feet; two stories; cost \$7000; plans by H. C. Maurer & Co., Beaumont; to be occupied by Houston Packing Co.

## CLAYWORKING PLANTS

Ga., Columbus.—Brick and Terra-cotta.—Southern Brick & Terra-cotta Co. incorporated with \$70,000 capital stock by A. Ilges, T. W. Bates and W. Mercer Morris; acquired property of Muscogee Brick Co.

Md., Baltimore.—Edward Bennett Pottery Co., 1301 Fleet St., has plans by John Freund, Jr., 210 East Lexington St., Baltimore, for five factory buildings at Edna St. and Cau-

ton Ave.; three stories; brick; about 29x244 feet; cost \$25,000. No bids wanted.

Mo., Shelbyville.—Clay Products.—Jacob Raby, president of Shelbyville Brick & Tile Co., purchased 113 acres of land containing coal and clay deposits and will develop.

N. C., Greensboro.—Brick.—James W. Jennings will establish brick plant.

Tex., Ferris.—Bricks.—Globe Press Brick Co., T. P. Weatherford, president, is proceeding with construction of plant recently noted to be rebuilt; day's labor; machinery purchased; plant to be in operation within 40 days.

Tex., Tenaha.—Bricks.—J. J. E. Gibson will establish brick plant; will install brick kiln.

W. Va., Grafton.—Brick.—L. M. Shute purchased Loyce brick plant for \$8000; will make improvements.

W. Va., Charles Town.—Valley Brick Co. (recently reported incorporated with \$25,000 capital stock) organized with John Strother, president and general manager; H. P. Cline, vice-president; Thomas R. Moore, secretary; awarded contract for equipment.

W. Va., Keyser.—H. W. Dickey, Wheeling, W. Va., purchased and will operate plant of Keyser Pottery Co.; two-kiln; annual capacity \$60,000 worth of pottery.

## COAL MINES AND COKE OVENS

Ky., Salyersville.—Through Attorney N. P. Howard, capitalists of West Virginia have closed contracts at \$100,000 for 10,000 acres coal lands in Magoffin county, along borders of Floyd, Breathitt and Knott counties; surveying, abstracting, etc., to be commenced at once.

Ky., Wasloto.—Asher Coal Mining Co. incorporated with \$50,000 capital stock by T. J. Asher, H. H. Asher and others of Wasloto, and Wm. Low of Pineville, Ky.; will develop three leases; No. 1 mine on Crane Creek, 5000 acres; No. 2 mine on Cumberland River, 2000 acres; No. 3 mine on Toms Creek, 7000 acres; No. 2 mine equipment, costing \$150,000, operating in 30 days; at once open proposals for other equipment; machinery purchased includes 500-kilowatt alternating-current generator, steam turbine, boilers, shaker screens; power to be conveyed to two other mines from power-house at No. 2 mine; 10,000 volts. (See "Machinery Wanted.")

Ky., Louisville.—Greasy Fork Coal & Timber Co. incorporated with \$250,000 capital stock by R. Carnahan, A. V. Thompson, Thomas R. Gordon and A. S. Rice, all of Louisville; John G. White, Winchester, Ky.; will purchase and develop coal and timber land in Harlan, Letcher and Leslie counties.

Mo., Shelbyville.—Jacob Raby, president Shelbyville Brick & Tile Co., purchased 113 acres of coal and clay lands and will develop.

Okla., Wilburton.—Choctaw Coal Co. organized with \$350,000 capital stock to develop W. I. Thomason tract of coal land, comprising about 3480 acres. Address company, care Mr. Thomason.

Tenn., Chattanooga.—J. A. Booher contemplates developing coal mines.

Tenn., Harriman.—Tennessee Timber, Coal & Iron Co., Chas. W. Whitcomb, general manager, 161 Devonshire St., Boston, Mass., is reported to have purchased 20,000 acres coal and timber land.

Tex., Bastrop.—W. C. Siliman, San Antonio, Tex., will develop 450 acres of coal land.

W. Va., Bluefield.—United States Coal & Coke Co., Carnegie Bldg., Pittsburg, Pa., plans to develop another coal mine—No. 13.

W. Va., Bluefield.—Central Pocahontas Collieries Co. will develop additional coal mine.

W. Va., Clarksburg.—Peacock Coal Co. is preparing to develop coal mines.

W. Va., Fairmont.—Hutchinson Coal Co. incorporated with \$1,000,000 capital stock by M. L. Hutchinson, C. E. Hutchinson and C. H. Jenkins of Fairmont, V. L. Highland and S. C. Denham of Clarksburg, W. Va.; understood company will acquire various existing mining plants and coal lands; C. H. Jenkins, secretary-treasurer, advises Manufacturers' Record that authoritative statement will be made later.

## CONCRETE AND CEMENT PLANTS

Ala., Montevallo.—Atlas Portland Cement Co., 30 Broad St., New York, has. It is reported, purchased 400 acres of shale deposits with view to building Portland cement plant.

Miss., McComb City.—J. N. McDonald and W. A. Andrews will establish plant for manufacturing cement brick.

Mo., St. Louis.—Modern Cement Products Co. incorporated with \$15,000 capital stock by John Nyflot, Henry Otto, Charles Nelson, James H. Leathers and others.

## COTTON COMPRESSES AND GINS

Ga., Tifton.—D. A. Carter and associates, Atlanta, Ga., will establish cotton gin. (See "Cottonseed-oil Mills.")

La., Mansfield.—J. W. Porter contemplates organization of company to establish cotton gin; will erect building; machinery order placed.

La., Mansfield.—Wm. C. Pegues is interested in organization of company to establish cotton gin; will open bids shortly for erection of building; capital stock \$10,000.

Tex., Pearsall.—J. W. Devillibus and J. W. Ward will establish \$10,000 cotton gin.

Tex., Kosse.—Munger Gin & Oil Co., Mexia, Tex., will establish cotton gin; five 80-saw stands.

## COTTONSEED-OIL MILLS

Ga., East Point.—Gresham Manufacturing Co., Griffin, Ga., has contract to erect \$50,000 cotton-oil mill.

Ga., Tifton.—D. A. Carter and associates of Atlanta, Ga., will establish cottonseed-oil mill and cotton gin; cost \$80,000.

S. C., Woodruff.—Woodruff Cotton Mill Co. changed name to Woodruff Oil & Fertilizer Co. and increased capital stock from \$20,000 to \$35,000; same officers; W. F. Bryson, president and treasurer; R. D. Bryson, secretary. (Recently incorrectly noted under "S. C., Columbia.")

## DRAINAGE AND IRRIGATION SYSTEMS

Ark., Paragould.—Waddell & Mitchell, engineers, of Paragould, are making surveys for construction of Locust Creek ditch No. 2 and Greene and Lawrence county ditch; latter is for purpose of straightening and widening Cache River, and is designed to drain entire Cache Valley; it will have 60 miles of laterals in Greene county and 40 miles in Lawrence county; estimated cost, \$500,000; J. T. Sain, H. E. Walker and Ed Edrington, viewers on Locust Creek ditch No. 2, are preparing report.

Fla., Tallahassee.—Board of Drainage Commissioners of Florida, J. C. Luning, secretary, will open bids June 15 for excavation of five drainage canals in the Everglades; aggregate length, 235 miles; excavation, 18,000,000 cubic yards of earth and 6,000,000 cubic yards of rock; J. O. Wright, chief drainage engineer. (Recently mentioned. See "Machinery Wanted.")

La., St. Bernard.—Sebastian Roy, Gustave Jacques, N. H. Nurex and others are interested in reclamation of 27,000 acres of swamp land in St. Bernard parish; received bids from engineers for making surveys.

Mo., Doniphan.—Commissioners of Naylor Drainage Ditch District No. 1 awarded contract at 8 cents per cubic yard to Otto and J. S. Kotchitzky, Cape Girardeau, Mo., to construct main drainage ditch; length nine miles; drain about 15,000 acres; require removal of 278,000 cubic yards of earth; cost of work when completed, about \$33,000; A. C. Spikes, civil engineer, Bloomfield, Mo., is in charge.

Okla., Oklahoma City.—Oklahoma Land Reclamation Co. organized with \$200,000 capital stock by Anton H. Classen, John W. Shartel, O. P. Workman, W. A. Haller and M. L. Splitler; will dredge North Canadian River between Western and Pennsylvania Aves. to depth of 10 feet and width of 200 feet; soil removed to be used to raise adjacent lands from two to six feet; equipment, including high-power dredging plant, pumps, cutters, etc., has been ordered; about 2000 acres of land will be reclaimed.

Tenn., Trenton.—North Fork Drainage District, J. W. Jetton, president, will have surveys made for drainage system.

Tex., Chapin.—Valley Reservoir & Canal Co. awarded contract to Hockney, Sammons & Lovett of Chapin to construct first eight miles of canal for irrigation of 100,000 acres of land in Hidalgo county in vicinity of Chapin; main canal is to be 35 miles long; about 50 miles of laterals; Lake Conception is to be used as reservoir; Fred Warren of Chapin is engineer in charge. (Further facts recently mentioned.)

Tex., San Antonio.—Edgewood Irrigation Co. incorporated with \$6720 capital stock by



George W. Foote, Hamer H. Griffith and Parker Longworth.

### ELECTRIC-LIGHT AND POWER PLANTS

Ark., Harvard (not a postoffice).—St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo., will install electric-light plant.

Ark., Waldron.—City is having plans prepared by E. W. Gantt of Sequoyah Engineering Co., Fort Smith, Ark., for electric-light plant.

Fla., Milton.—City voted \$5000 bond issue for construction of electric-light plant. Address The Mayor.

Ga., Calro.—City voted May 2 on issuance of \$6000 of bonds for extension of electric-light system. Address The Mayor.

Ga., Sylva.—City voted \$40,000 of bonds for construction of electric-light plant, sewer system and water-works. Address The Mayor.

Ky., Albany.—S. G. Smith, E. Bertram and Hancock Bros. purchased water mill and eight acres of land; will install electric-lighting plant.

Md., Baltimore.—Wehr, Walden & Dukehart, 412 Continental Bldg., are engineers in charge of construction of gravity dam to replace wooden dam; concrete; 250 feet long; 2000 cubic yards concrete; now ready for construction proposals. (See "Machinery Wanted.")

Md., Elkton.—Elkton, Fair Hill & Oxford Electric Railway & Power Co. will construct electric-power plant.

Mo., Tipton.—City contemplates voting on issuance of bonds for construction of electric-light plant; cost \$15,000; Joseph Sommerhauser, City Clerk.

Mo., Osceola.—Utt Bros. and L. J. Highland, engineer, of 108 La Salle St., Chicago, Ill., are promoting construction of steel and concrete dam across Osage Run; crest of dam 10 feet above low-water mark; cost of construction \$25,000; equipment to cost \$25,000; auxiliary plant \$50,000; 1000 horse-power capacity.

N. C., Durham.—Southern Power Co. of Charlotte, N. C., has completed surveys and selected rights of way for construction of system of wires to transmit electricity to Durham from water-power-electrical developments; system to include steel towers 55 feet high; rumored that an auxiliary steam plant will be erected.

Okla., Francis.—City is negotiating with W. L. Bell, representing Federal Utility Corporation, Kansas City, Mo., for construction of electric-light plant. (See "Ice and Cold-Storage Plants.")

S. C., Greenville.—Southern Power Co., Charlotte, N. C., awarded contract to Dixie Concrete Co. of Greenville to construct power-house near Monaghan Mill and reservoir, 350x700 feet, in connection with \$300,000 steam power plant recently mentioned; Westinghouse Electric & Manufacturing Co., Pittsburgh, Pa., has contract for equipment.

S. C., Greenville.—J. Thomas Arnold is chairman of committee proposing organization of company with \$100,000 capital stock to establish electric-light plant.

Tenn., Elizabethton.—Doe River Lighting & Power Co. awarded contract to Lowe Construction Co. of Bristol, Tenn., for construction of dam at Horseshoe Bend on Watauga River; dam 300 feet long, 50 feet high and 48 feet wide; develop 3000 horse-power for transmission by electricity; Doe River corporation has contract to furnish electricity to Bristol Gas & Electric Co. of Bristol; Doe River corporation states details as follows: Dam location, seven miles east of Elizabethton; dam of solid concrete; 50 feet high to spillways; 155 feet long; 40 feet on base; penstock of reinforced concrete, 35 feet wide, 80 feet long, 25 feet high; power-house 30x80x20 feet high, 40x100 feet, of concrete; tall race 300 feet long by 40 feet wide by 6 feet deep; foregoing construction estimated to cost \$77,000; cost complete, with water-power and electrical machinery, \$250,000; electrical machinery will include two 1000 kilowatt generators, three-phase, 60 cycles, 2300 volts; three transformers for one of these units and to step current up from 2300 to either 22,000 or 33,000 volts; three transformers to step this voltage back to 2300 volts; switchboard complete, with instruments, copper wire, etc., for 22-mile transmission line of high voltage; water-power machinery will include three units of turbines to operate under 50-foot head and develop 1200 horse-power each; two governors to control speed regulations. Doe River company, J. H. Grayson, general manager, in market for above machinery and invites inspection of property not later than May 15

and bids not later than June 1; will take up electrical proposition as soon as speed of wheels is determined. This plant previously announced proposed. (See "Machinery Wanted.")

Tex., Austin.—City officials signed contract with J. C. Dumont of Austin, representing Dumont-Holmes Steel Concrete Co. of Chicago, Ill., and Detroit, Mich., for construction of dam on site of dam previously destroyed by flood; (Council passed ordinance ratified by municipal vote recently); reinforced concrete construction; mechanical equipment to include three 1000-horse-power turbines, two 500-horse-power turbines, two pumps, each of 6,000,000 gallons capacity daily; electrical generators, etc., for developing 3750 horse-power; Mr. Dumont has placed order for most of machinery, and has proposals for balance of material; begin construction within 90 days. Address J. C. Dumont at Austin. (Other details reported recently.)

Tex., Beaumont.—I. D. Polk applied for franchise to construct and operate electric-light and power plant. (Recently incorrectly noted under Tex., Houston.)

Tex., Cleburne.—Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., will erect power plant; building to be fireproof; 40x180 feet; concrete foundation; cement floor.

Tex., Handley.—Northern Texas Traction Co. contemplates construction of power-house to cost \$30,000.

Tex., Hempstead.—Hempstead Light & Power Co. incorporated with \$10,000 capital stock by M. Schwarz, John C. Amaler, J. D. Harvey and others.

Tex., La Porte.—Houston-Bay Shore Traction Co., J. G. Miller, engineer, Houston, Tex., will construct power plant and car barn; concrete construction; steel frame; length 225 feet; width 175 feet; height 24 feet; generating power plant is to be installed with capacity of 10,000 volts or 900 horse-power; steam is to be used exclusively as generating power; section of structure to be used for storing cars will accommodate 12 passenger cars, 2 baggage and 2 general construction cars; estimated cost, \$110,000; company will also build subpower plant and passenger station at South Houston, but on smaller scale; will also erect six cement passenger and express depots. (See "Bridges, Culverts, Viaducts, etc.")

Va., Graham.—Graham Water & Electric Co. (recently mentioned) has not completed organization; Jas. F. Dudley will be president; Wm. Mitchell, vice-president; R. B. Williamson, secretary; C. W. Keister, treasurer. (See "Water-works.")

Va., Richmond.—City awarded contract to Storms & Co., Newark, N. J., at about \$55,000 to construct overhead distributing system of municipal electric plant. (Recently mentioned.)

### FERTILIZER FACTORIES

Fla., Jacksonville.—Wilson & Toomer Company will make improvements to plant, including erection of 60-foot addition to warehouse and addition to main building, 60x400 feet; also install electric tramway system.

La., New Orleans.—J. A. Coyle contemplates establishment of fertilizer factory.

Md., Baltimore.—Baugh & Sons Company, Calvert and Water Sts., will rebuild portion of plant reported burned at Clinton and 11th Sts.; loss \$30,000.

N. C., Beaufort.—Doan & Bartlett Company incorporated with \$12,000 capital stock by F. A. Doan, Jr., W. A. Moore and Henry W. Noe.

S. C., Chester.—S. J. Charlton, Chicago, Ill., and F. R. Bates of Wilmington, N. C., will establish fertilizer-mixing plant; 200 feet long; 10,000-ton capacity.

### FLOUR, FEED AND MEAL MILLS

Fla., Brooksville.—J. L. and R. W. Boynton will establish water mill for grinding corn, hulling beans and rice.

Tenn., Memphis.—August J. Butte Milling Co. incorporated with \$25,000 capital stock by August J. Butte, D. P. Hughes, A. T. B. Dun and others.

Tex., Balmorhea.—Toyah Valley Alfalfa Milling Co. incorporated with \$25,000 capital stock by E. D. Balcom, W. R. Baughman and Will J. Rhea.

W. Va., Union.—A. J. Dixon will probably rebuild flour and feed mill reported burned; loss \$4300.

### FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Molding Device.—Chas. King will establish plant for manufacturing patented molding device for making brass furia.

Ala., Bessemer.—Iron Pipe.—United States Cast Iron Pipe & Foundry Co. plans enlargement of plant in future; details not decided.

Ky., Covington.—Foundry.—Kenton Foundry Co. increased capital stock to \$15,000.

D. C., Washington.—Firth-Sterling Steel Co. of Pittsburgh, Pa., will erect shops at Giesboro Point; brick construction; cost \$13,000; Washington address, P. O. Box 812.

Mo., St. Louis.—Stoves.—American Stove Co. will erect six factory buildings; one and two stories; cost \$225,000.

Miss., Biloxi.—Machine Shop, etc.—Biloxi Machine Works organized with William Gorenflo, president; George B. Elder, general manager; Lee Elder, secretary; J. C. Clower, treasurer; consolidation of G. B. Elder & Co. and Despotte Bros.; offices, 448-450 Delauney St.; will conduct general machine shop, automobile garage, etc. (See "Machinery Wanted.")

Okla., Ramona.—Machinery.—Ramona Machine Co. incorporated with \$10,000 capital stock by J. B. Hinkle, C. E. Menger, both of Ramona, and F. I. Louir of Tulsa, Okla.

Mo., St. Louis.—Emrick Power Hammer Co. incorporated with \$10,000 capital stock by Frank C. Emrick, T. W. Remmers and C. L. Schwartz.

Tenn., Memphis.—Machinery and Tools.—Motley-Goodlet-Richmond-Motley Machine & Tool Co. incorporated with \$5000 capital stock by J. E. Goodlet, John S. Motley, W. L. McGoldrick and others.

Va., Alta Vista.—Hay Balers.—Damron Machinery Corporation incorporated with \$120,000 capital stock; H. L. Lane, president, Alta Vista; C. M. Perrow, vice-president, Lynchburg, Va.; A. G. Bell, secretary-treasurer, Alta Vista; will manufacture Damron hay baler.

W. Va., Glendale.—Anti-friction Metal.—Wheeling Metal & Manufacturing Co., Wheeling, W. Va., will rebuild portion of plant reported burned; loss \$12,000; contract awarded; machinery order placed.

W. Va., South Charleston.—Forging.—Baldwin Forging & Tool Co., Frank M. Baldwin, president, Columbus, O. (recently noted considering Charleston as location for proposed plant), will make location decision early in May; contracted for machinery; will erect building with about 100,000 square feet ground floor space; brick, steel and slate; building proposals opened in about two weeks; plans, by F. L. Packard of Columbus, to be ready about May 7; plant to have daily capacity of 500 shovels, spades and scoops.

### GAS AND OIL DEVELOPMENTS

Ark., Little Rock.—Arkansas Natural Gas Co. awarded contract to Behn Cook, Marshall, Tex., to survey pipe line from Caddo (La.) gas fields through to Camden, Hot Springs and Little Rock; 200 miles.

Mo., St. Joseph.—St. Joseph Oil Co. incorporated with \$10,000 capital stock by Albert Hindera, Con P. Hindera and James B. O'Connor.

Okla., Byars.—Byars-Stratford Oil & Gas Co. incorporated with \$30,000 capital stock by Zene Foster of Byars, H. G. Foster of Stonewall, Okla., and Whit. W. Hyden, Sr., of Stratford, Okla.

Okla., Nowata.—Coleman Oil & Gas Co. incorporated with \$10,000 capital stock by E. B. Lawson, Nowata; A. L. Hill, Neodesha, Kans., and C. H. McCready, Bartlesville, Okla.

Okla., Okmulgee.—Old Mission Oil Co. incorporated with \$12,000 capital stock by W. E. Wood, O. E. Filey and Jay McCready.

Okla., Tulsa.—Grande Oil Co. incorporated with \$25,000 capital stock by William N. Silla of Nowata, Okla.; J. P. McCandless and J. E. Ward, both of Chanute, Kans.

Tex., Normangee.—Normangee Oil & Gas Co. incorporated with \$20,000 capital stock by W. D. McDonald, J. D. Cowden and D. E. Watson.

W. Va., Grafton.—Standard Oil Co., 26 Broadway, New York, is reported to have purchased holdings of Manufacturers' Light & Heat Co. in West Virginia for \$3,000,000; properties include oil and gas lands, gas and oil wells, pipe lines, etc.

W. Va., Parkersburg.—Cooper Oil & Gas Co. incorporated with \$32,000 capital stock by Charles E. Braden, C. L. Brown, K. Snodgrass and others.

W. Va., Wheeling.—Schnegg Oil & Gas Co. incorporated with \$10,000 capital stock by Benjamin L. Rosenbloom, E. S. Bippus, E. H. Rau and others.

### ICE AND COLD-STORAGE PLANTS

Ark., Marion.—Frisco Ice Co. incorporated with \$25,000 capital stock by C. W. Copeland, Tonny Howell and J. T. Copeland.

Ga., Millen.—Enterprise Ice Plant, John M. Edenfield, proprietor, purchased machinery for ice plant recently noted; 10 tons capacity.

Ga., Nashville.—Nashville Ice & Manufacturing Co., recently reported incorporated with \$10,000 capital stock, will erect 40x90-foot wooden building; ordinary construction; cost \$1000; company's force will erect; machinery purchased; 10 tons of ice and cold storage daily capacity; B. A. Beale, Jr., president; W. E. Algee, secretary.

Md., Ellicott City.—Maryland Ice & Manufacturing Co. (recently noted) organized with \$25,000 capital stock; W. W. Parker, president, 23 Central Savings Bank Bldg., Baltimore, Md.; August C. Kira, secretary-treasurer; E. M. Gillet, New Cut Rd., sales agent, both of Ellicott City; will manufacture beverages and ice; cost of real estate and plant, \$5500.

Okla., Francis.—Federal Utility Corporation, Kansas City, Mo., is negotiating with city for establishment of ice and electric-light plant and water-works; cost \$300,000 to \$350,000.

Tex., Houston.—Transit Ice Co. is organizing to establish icing and refrigeration plant on Texas and New Orleans tracks for Harriman lines in Texas; facilities for icing train of cars in 15 minutes and able to ice 15 cars without shifting; storage capacity 100 tons; ice will be transferred direct from plant to bunkers of cars either by chain conveyors or live rollers; operated by electricity.

Tex., Mart.—J. B. Earle may be addressed relative to erection of proposed ice plant.

Tex., Luling.—Luling Ice & Refrigerating Co. incorporated with \$10,000 capital stock by Ted H. Milburn, Merton H. Abbott and G. Everett Coley.

Tex., Taylor.—Taylor Ice Co. incorporated with \$50,000 capital stock by G. E. Klug, A. J. Zilker and Noyes D. Smith.

Tex., Taylor.—Taylor Ice Co. incorporated with \$50,000 capital stock by G. M. King, A. J. Zilker and Noyes D. Smith.

W. Va., Shepherdstown.—Johnson & Miller Company incorporated with \$10,000 capital stock by F. L. Johnson, J. H. Miller, J. L. Johnson and others.

### LAND DEVELOPMENTS

Ala., Birmingham.—Lockerable Land Co. incorporated with \$3000 capital stock; Forney Johnston, president; E. W. Rucker, vice-president and treasurer; E. W. Rucker, Jr., secretary.

Ala., Ensley.—Corey Heights Land & Improvement Co. organized with \$50,000 capital stock by J. M. Perkinson and J. J. Walker; purchased land adjoining east side of Corey.

Ala., Citronelle.—H. and J. Riedemann and Mr. Cramer of Callao, Mo., purchased Michard fruit orchards and will convert portion into truck fields; contemplate establishment of ice and electric-light plants and construction of lake later.

Ala., Gadsden.—Greenwood Land Co. organized with C. C. Baxter president, T. U. Walker vice-president, M. M. Ullman secretary; will develop residential section.

Ark., Little Rock.—North Arkansas Townsite Co., recently reported incorporated with \$50,000 capital stock, will develop townsites; W. B. Smith, president; R. C. Wilkins, vice-president-treasurer; F. J. Schmutz, secretary.

Fla., Chipley.—Glen Land Co. incorporated with \$50,000 capital stock by John B. Glen, R. A. Alford, E. N. Dekle and others.

Fla., Garden City.—Dixie Land Co. incorporated with \$2500 capital stock by J. P. Davis, W. A. Little and P. A. Davis.

Fla., Jacksonville.—Suburban Realty Co. incorporated with \$30,000 capital stock by Wm. H. Hamrick, Frank E. Jennings and Eugene Hale.

Fla., Jacksonville.—Okeechobee Fruit Lands Co. incorporated with \$100,000 capital stock by R. J. Bolles, W. B. Jennings, A. W. Cain and others.

Fla., Jacksonville.—David E. Geeghley purchased for Dayton (O.) capitalists 8000 acres of land, for about \$125,000; will subdivide and colonize.

Fla., Ocala.—E. P. Rents purchased 125,000 acres of land and will develop for colonization purposes.

Fla., Ocala.—New South Farm & Home Co. purchased 60,000 acres of land and is arranging for 100,000 additional acres; will colonize.

Fla., Orlando.—South-Land Home Co. incorporated with \$25,000 capital stock by Chester Kennison, C. G. Murphy and T. P. Warlow.

Fla., Orlando.—Concord Park Development Co. incorporated with \$15,000 capital stock by

T. Pictor Warlow, Moses O. Overstreet and L. L. Payne.

Fla., St. Augustine.—Simmons & Holmes purchased 1000 acres of land, and will cultivate celery.

Fla., Tampa.—Warder-Limbach Realty Co. incorporated with \$200,000 capital stock by W. J. Warder, Charles Limbach and W. J. Warder, Jr.

Fla., West Palm Beach.—Palm Beach Improvement Co. incorporated with \$100,000 capital stock; E. N. Dimick, president; H. G. Geer, vice-president; George W. Jonas, secretary-treasurer.

Ga., Atlanta.—Thatcher Improvement Co. incorporated with \$10,000 capital stock by W. A. Thatcher, C. L. Shane, C. R. Haskins and others.

Ga., Savannah.—Atlantic Investment Co. incorporated with \$10,000 capital stock by Walter Wolledge, Max B. Erlicher and A. J. Merkle.

Ga., Savannah.—Montgomery Heights Co. incorporated with \$5000 capital stock by Carl Mendel, C. H. Koneemann and Fred Wesels, Jr.

Kentucky.—Mrs. Kate Hawley of New York, J. A. Crawford, Terrehaute, Ind., and William Carroll purchased site on Kentucky side of Ohio River and will develop factory town to be known as Riverview.

La., New Orleans.—Richton Realty Co. incorporated with Joseph F. Walton, president; Harry E. Hinrichs, secretary-treasurer.

Md., Baltimore.—Clarence M. Griffin, 515-17 Galtier Bldg., purchased Regester farm, between Hillen and York Rds., containing 228 acres, for \$60,000; will subdivide into 400 building lots, install sewerage system and pumping station to supply water, macadamize roads, erect dwellings, etc.

Mo., Kansas City.—North Side Development Co. incorporated with \$20,000 capital stock by Mason Dean, J. W. Reinhart and Outley Leming.

N. C., Winston-Salem.—Southern Development Co., H. A. Stecker, engineer, is developing 60 acres of land for residential section, to be known as Crafter Heights.

Okla., Carmen.—Carmen Improvement Co. incorporated with \$15,000 capital stock by R. L. Mims, John Roll and F. E. Wentworth.

S. C., Charleston.—Charleston Guaranty & Investment Co. organized with \$300,000 capital stock; R. Goodwyn Rhett, president; T. T. Hyde, vice-president and treasurer; T. T. Hyde, Jr., secretary.

S. C., Greenville.—Hugenot Land Co. incorporated with \$30,000 capital stock by J. A. Norwood, Lewis W. Parker and H. J. Haynsworth.

Tenn., Chattanooga.—Lookout Realty Co., 7 East 8th St., organized with \$25,000 capital stock by W. J. Bass, W. T. Tyler, L. M. Thomas and others.

Tenn., Memphis.—Clover Lawn Realty Co. incorporated with \$10,000 capital stock by Ralph A. Slocum, W. P. Biggs, C. A. Price and others.

Texas.—New York-Texas Land Co. incorporated with \$250,000 capital stock by John R. Turner, 17 Exchange Pl., Jersey City, N. J.; Worden E. Winn and Leon M. Woodworth, both of 2 Rector St., New York, and others.

Va., Winchester.—Rosemont Orchard Corporation incorporated with \$25,000 capital stock by H. F. Byrd (president), W. D. Smith and E. W. Smith.

W. Va., Stouts Mills.—Martin Development Co. incorporated with \$25,000 capital stock by Geo. M. Martin, Roy Martin and others.

### LUMBER-MANUFACTURING PLANTS

Ala., Attalla.—John Hays and associates will establish planing mill; cost \$10,000; machinery purchased.

Ark., Glenwood.—Glenwood Sawmill Co., F. McL. Alexander, proprietor, purchased machinery for sawmill recently mentioned; daily capacity 35,000 feet yellow pine lumber.

Ark., Pine Bluff.—Saline River Lumber Co., Toronto, Canada, contemplates, it is reported, establishment of hardwood mill either at Pine Bluff or Fordyce, Ark.

Ark., Prescott.—Prescott Land & Timber Co. incorporated with \$50,000 capital stock; Nat Martin, president; M. L. Moore, vice-president; John A. Davis, secretary-treasurer; B. B. Young, manager; purchased 8000 acres of timber land in Clark county and will establish sawmill.

Ark., Fordyce.—Saline River Lumber Co., Toronto, Canada, contemplates, it is reported, establishment of hardwood mill. (See Ark., Pine Bluff.)

Ark., Texarkana.—R. L. Trigg Lumber Co., recently reported incorporated with \$10,000

capital stock, will continue operation of established plants; R. L. Trigg, president; Jose Fuqua, vice-president; R. W. Johnson, secretary.

Fla., Brooksville.—Central Cypress Lumber Co. organized by Edgar A. Roberts, Coleman, Fla., and associates; to develop tract of cypress timber in Hernando county.

Fla., Fort Lauderdale.—H. R. Brown, Greenville, Fla., purchased \$25,000 worth of timber land.

Fla., Jacksonville.—Gillespie Lumber Co. organized with \$50,000 capital stock; D. L. Gillespie, president, Pittsburg, Pa.; E. I. Burdette, secretary; E. L. Wolff, treasurer, both of Jacksonville.

Fla., Leesburg.—Lake Land & Lumber Co., Monroe, N. C., recently reported incorporated (under Monroe) with \$100,000 capital stock, has purchased lands and will establish lumber plant; will open machinery bids at once; R. B. Redwine, president; John R. English, vice-president; John C. Sikes, secretary-treasurer; Jas. H. Williams, manager. (See "Machinery Wanted.")

Fla., Manatee County.—R. S. Hall, Ocala, Fla., purchased for development 66,000 acres of timber land.

Fla., Ocala.—Roess Lumber Co. incorporated with \$50,000 capital stock by M. J. Roess, C. L. Anderson, C. P. Moore and others.

Fla., Ocala.—Ocala Lumber & Supply Co. incorporated with \$50,000 capital stock by M. J. Roess, C. L. Anderson, C. P. Moore and others.

Ga., Macon.—W. F. Suber & Co. incorporated with \$15,000 capital stock by W. F. Suber, M. T. Elder and others.

Ga., Macon.—W. F. Elder Lumber Co. incorporated with \$12,000 capital stock by W. F. Elder, N. T. Suber and others.

Ga., Valdosta.—J. M. Youngblood Company incorporated with \$15,000 capital stock by J. M. Youngblood, T. O. McLendon and J. F. Fender.

Ky., Bowling Green.—L. C. Gooch Lumber Co. increased capital stock to \$40,000; will install band saw (to replace circular saw) and double capacity.

Ky., Jackson.—W. A. Williams, J. W. Johnson and others of Johnson Lumber Co., Huntington, W. Va., purchased 27,000 acres of timber lands in Breathitt county; will install portable sawmills.

Ky., Louisville.—Greasy Fork Coal & Timber Co. incorporated with \$250,000 capital stock; John G. White, president, Winchester, Ky. (See "Coal Mines and Coke Ovens.")

La., Huggins, P. O. Slinger.—Batson & Hatten Lumber Co. organized with \$50,000 capital stock; R. Batson, president; W. H. Hatten, vice-president; N. P. Hatten, secretary-treasurer.

La., Eunice.—Alexander Hardwood Co. organized with \$50,000 capital stock; Ed Alexander, president; J. C. Blevins, vice-president; T. B. Milkey, secretary-treasurer.

La., Roseland.—L. J. Patenotte will establish lumber plant to manufacture 30,000 feet yellow pine daily; cost of plant, equipped, about \$4000; two mill-construction buildings to be planned and erected by owner.

La., Loring.—Bowman-Hicks Lumber Co. will rebuild planing mill reported burned.

Miss., Newton.—Newton Lumber & Manufacturing Co. will establish band-saw mill; daily capacity 35,000 feet of lumber; machinery purchased.

Miss., Tylertown.—Rex Lumber Co. incorporated with \$10,000 capital stock by A. H. Ball, Columbia, Miss., and others.

Tenn., Hardin County.—H. L. and J. L. Porter of Savannah, Tenn., purchased Lovelace timber tract for \$8000.

Miss., Woodville.—F. D. Lewis and C. W. McKelthen will establish sawmill.

N. C., Elkin.—New Hope Veneer Co. incorporated with \$20,000 capital stock by G. T. Roth, Elkin Veneer & Manufacturing Co. and S. M. Arnold.

N. C., Garland.—Fleming Bros. Lumber & Manufacturing Co. incorporated with \$100,000 capital stock by George W. Fleming of Garland, Clarence D. Fleming of Pocomoke City, Md.; Berton S. Reese of Allentown, Pa., and William M. Fleming of Scranton, Pa.

N. C., Monroe.—Lake Land & Lumber Co., R. B. Redwine, president (recently reported incorporated with \$100,000 capital stock), will establish sawmill in Florida. (See Fla., Leesburg.)

Okla., Muskogee.—Page Lumber Co. incorporated with \$10,000 capital stock by J. F. Hufbauer, Emma C. Hufbauer, both of Newkirk, Okla., and T. B. Page of Muskogee.

Okla., Idabel.—Idabel Lumber Co. incorporated with \$10,000 capital stock by Ben Miller, Jr., J. C. Griffith and William Robinson.

S. C., Charleston.—Oak Lumber Co. incorporated; C. F. Muckenfuss, president.

S. C., Rock Hill.—Stylecau Manufacturing Co. increased capital stock from \$10,000 to \$20,000.

Tenn., Charlotte.—H. Lumber Co. incorporated with \$5000 capital stock by Pitt Henslee, S. G. Holland, S. G. Robertson and others.

Tenn., Harriman.—Tennessee Timber, Coal & Iron Co., Chas. W. Whitcomb, general manager, 161 Devonshire St., Boston, Mass., is reported to have purchased 20,000 acres of timber and coal land.

Va., Belle Haven.—S. R. Jones purchased machinery for sawmill recently reported rebuilt; daily capacity 9000 feet.

Va., Charlotte and Campbell Counties.—Ward Lumber Co., Lynchburg, Va., will develop 1000 acres timber land recently noted purchased; oak, poplar and short leaf yellow pine; will use two circular mills, already located; M. L. Booth, Brookneal, Va., manager in charge.

W. Va., Parkersburg.—Neal Timber Co. incorporated with \$10,000 capital stock by R. L. McFarland, A. T. Barrett, H. Roy Waugh and others.

### METAL-WORKING PLANTS

Ark., Fort Smith.—Steel Kegs.—Equitable Powder Co. will establish plant for manufacturing steel kegs; estimated to use \$5,000 to 100,000 pounds of sheet steel monthly.

Ark., Hope.—Metal Frames, Screens, etc.—Hope Metal Frame & Screen Manufacturing Co. incorporated with \$20,000 capital stock; A. T. Black, president; W. D. Hudson, secretary-treasurer; W. M. Smith, manager.

Ga., Augusta.—Metal Tags.—Standard Tag Co. incorporated with \$15,000 capital stock; C. J. Crawford, president, Augusta, Ga.; R. G. Hitt, manager, Atlanta, Ga.; A. S. Hatch, treasurer; H. C. Brown, secretary, both of Augusta; will manufacture metal tags for cotton bales invented by Mr. Hitt; temporary offices, Empire Bldg., Atlanta, Ga.

La., New Orleans.—Metal Turpentine Cups.—Byrd Turpentine Cup Co., L. D. Byrd, manager, Biloxi, Miss., contemplates establishment of plant.

Okla., Oklahoma City.—Wire Fence.—George H. Cox & Co. are organizing Farmers' Wire Fence Co. to establish plant near Delmar Heights. Address care of Real Estate Exchange.

Va., Staunton.—Shingles.—Gossett, McCrorey & Agnew will establish metal-shingle plant recently noted; capacity about 100 squares daily; has rented building and placed order for partial equipment of presses and dies; officers not elected. Address R. N. McCrorey, Greenville, S. C.

### MINING

Ala., Blue Pond.—Iron.—E. J. Bird, Ironton, O., and Jack Johnson, owners of Blue Pond mine, will develop mine to full capacity.

Ala., Fort Payne.—Iron.—Fort Payne Fuel & Iron Co. awarded contract to Alabama Mining Co. to mine and market iron ore from company's lands.

La., Pine Prairie.—Salt, Gypsum, etc.—F. F. Myles, New Orleans, La., will develop 8000 acres of land for salt, gypsum, limestone and oil.

Mo., Carthage.—Lead and Zinc.—Jesse French Mining Co., 1426 Missouri Trust Bldg., St. Louis, Mo., recently reported incorporated (under St. Louis) with \$50,000 capital stock, will develop 55 acres; Jesse French, president; Pinkney French, vice-president; J. A. Webb, secretary-treasurer.

Miss., Meridian.—El Zapote Mining Co. incorporated with \$100,000 capital stock by J. M. Phillips, Unlontown, Ala., and W. N. King, Toombsville, Miss.

Mo., Galena.—Lead and Zinc.—William Thacker of Colorado and Alex. Campbell of Springfield, Mo., leased six lots on Galena Lead & Zinc Co.'s land; will install additional machinery, work two shafts now on property, and probably erect mill.

Mo., Joplin.—Lead and Zinc.—Wiser Mining & Development Co., recently reported incorporated with \$50,000 capital stock, will develop 30 acres of land; F. W. Wiser, president; T. J. Barringer, vice-president; V. V. Wiser, secretary; Henry S. Rosenthal, treasurer, main office, 14 Model Bldg.

Mo., Newburg.—Lead and Zinc.—Dana Mining Co. incorporated with \$100,000 capital stock by B. H. Rucker, J. W. Scanlan and A. T. Steelman.

Mo., Pacific.—Sand and Gravel.—Pacific Sand & Gravel Co. incorporated with \$35,000 capital stock by L. C. and M. M. Dlatzke and Joseph Freund.

Mo., Joplin.—Lead and Zinc.—American Zinc, Lead & Smelting Co. will expend \$750,000 for extending operations.

Mo., Webb City.—Lead and Zinc.—Little Mary Mining Co. (recently reported incorporated with \$100,000 capital stock) will develop 40 acres; daily capacity 300 tons; Geo. W. Ball, president and manager; T. F. Coyne, vice-president; T. F. Lennan, secretary-treasurer.

Mo., Webb City.—Lead and Zinc.—Ruby D Mining Co. incorporated with \$3000 capital stock by W. S. Marquiss, H. E. Marquiss, E. Pulver and R. E. Ball.

Okla., Muskogee.—Golden West Mining Co. incorporated with \$150,000 capital stock by Homer E. Jones, P. H. Stein and J. E. Sweet.

Okla., Oklahoma City.—Gravel.—Oklahoma Gravel Co. incorporated with \$50,000 capital stock by Lee Van Winkle, A. F. Root and R. D. Farmer.

Tenn., Johnson City.—Sand.—Watauga River Sand Co., J. H. Smaling, president, will develop 40 acres of white-sand deposits. (J. H. Smaling incorrectly noted as president.)

Tex., Waco.—Mexico Mining Co. incorporated with \$33,000 capital stock by Charles G. Levi, John M. Dawson and J. S. Kendall.

Va., Craig County.—Iron, etc.—John L. Dickinson, cashier of Kanawha Valley Bank, Charleston, W. Va., purchased \$19,000 acres of land containing manganese and iron for \$20,000 from Manganese Iron & Coal Co.

### MISCELLANEOUS CONSTRUCTION WORK

Fla., Jacksonville.—Pier.—Mason Forwarding Co. awarded contract to T. J. Brown of Jacksonville to construct pier; 500x550 feet.

La., Plaquemine Parish.—Levee.—State Board of Engineers awarded contract to Doullut & Williams, 213 Machea Bldg., New Orleans, La., for restoration of Gulf Coast levee; repairing and raising 26 miles; 150,000 yards dirt; cost \$20,000; Major Frank M. Kerr, Cotton Exchange Bldg., New Orleans, La., of Louisiana State Board of Engineers, is in charge. (See "Machinery Wanted." Recently mentioned.)

Miss., Gulfport.—Steam Heating System.—H. A. Austin, constructing engineer of American District Steam Co., Lockport, N. Y., is surveying streets with view of obtaining franchise to construct underground system of mains for furnishing steam heat.

Miss., Greenville.—Levees.—Mississippi Levee Commissioners awarded contracts for construction of 927,000 cubic yards of levee construction, aggregating \$350,000, as follows: Roach & Stansell of Memphis, Tenn., at \$112,000 for 527,000 cubic yards at River-ton; Clarke, Gibson & Co., Natchez, Miss., at 16.40 cents per cubic yard for 148,000 cubic yards in section 3 at Shiloh, and to Roach & Stansell at \$50,000 for 252,000 cubic yards in sections 1 and 2 at Shiloh; latter contract has been sublet to Dulaney & Foote of Memphis.

### MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Sand, etc.—Empire Sand & Supply Co. incorporated with \$10,000 capital stock; A. R. Orr, president; W. B. Alexander, secretary-treasurer; R. G. Alexander, vice-president.

Ala., Montgomery.—Builders' Supplies.—Empire Sales & Supply Co. incorporated with \$10,000 capital stock; A. B. Orr, president; R. G. Alexander, vice-president; W. B. Alexander, secretary-treasurer.

Ark., Harrison.—Hardware.—Cantrell-Eoff Hardware Co. incorporated with \$12,000 capital stock by H. E. Cantrell, L. F. Eoff and Frank Pace.

Ark., Little Rock.—Construction.—Stewart McGhee Construction Co. incorporated with \$25,000 capital stock by W. R. Stewart, Ben C. McGhee and Abner McGhee.

Fla., Jacksonville.—Phosphate Elevator.—Cummer Lumber & Phosphate Co. will rebuild phosphate elevator reported damaged by storm.

Fla., Jacksonville.—Laundry.—Laundry Investment Co., T. W. Dunk, president, awarded contract to L. M. Boykin, Jacksonville, for erection of plant recently noted; to be occupied by New York Steam Laundry; building to be three stories; 100x105 feet; reinforced concrete; fireproof construction; plans by McClure & Holmes, Jacksonville; will install laundry machinery, boilers, engines, feed-water heater and water softener; estimated cost of plant \$30,000.

Fla., Tampa.—Garage.—H. T. Lykes awarded contract to Dekel & McGucken, Tampa, for erection of garage for Florida Gas En-



gine & Automobile Co.; two stories; 70x90 feet; pressed-brick exterior; first floor solid concrete; interior modified mill construction; cost, including equipment, \$16,000; plans by Bonfoey & Elliott, Tampa. (Recently mentioned.)

Ga., East Point—Printing.—W. Tom Callahan will rebuild printing plant reported burned; loss \$1000.

Ga., Savannah—Laundry and Cleaning Plant.—A. W. Solomon purchased and will install additional equipment for dry cleaning for E. & W. Laundry; also shirt and collar ironing devices.

Ga., Savannah—Stevedore.—Savannah Stevedore Co. incorporated with \$10,000 capital stock by George E. Cope and William S. Daffin of Savannah and W. W. Baker of Baltimore, Md.

Ky., Lexington—Garage.—Phoenix Garage Co. awarded contract to F. R. Dalton, Lexington, for erection of garage; cost \$25,000.

Ky., Louisville—Construction.—Audubon Construction Co. incorporated with \$100,000 capital stock by G. R. Hunt, J. R. Bridgeford and Jacob A. Steinau.

Ky., Mt. Sterling—Advocate Publishing Co. incorporated with \$6000 capital stock by E. W. Senff, G. B. Senff, T. D. Arthur and others; acquired Mt. Sterling Advocate.

Ky., Murray—Publishing.—Meloan Bros. Publishing Co., John M. Meloan, editor, will publish weekly newspaper to be known as Free Press; will install linotype machine, etc.

Md., Baltimore—Automobiles.—Maupin Motor Co., Mt. Royal and North Aves. (recently reported incorporated with \$8000 capital stock), is established in temporary quarters; contemplates erection of garage later; J. S. Ditch, president and treasurer; C. I. Boswell, vice-president; F. B. Maupin, secretary and manager.

Md., Frederick—Abattoir.—Frederick City Abattoir Co. organized with \$50,000 capital stock by T. B. Hayward, W. O. Kolb, W. O. Glaze and others; will establish abattoir and packing plant.

Miss., Gulfport.—American Steam Heating Co. will apply for franchise to establish steam heating system; meter system; heat furnished from exhaust pipes of power plant.

Mo., Kansas City—Publishing.—Roach-Fowler Publishing Co. incorporated with \$3000 capital stock by Arno L. Roach, Lizzie M. Roach, Charles C. Fowler and Maybelle C. Fowler.

Mo., Marshall—Hardware and Furniture.—Huff-Proctor Hardware & Furniture Co. incorporated with \$12,000 capital stock by C. G. Proctor, Minnie Proctor, John S. M. Huff and others.

Mo., St. Joseph—Construction.—Dubois Reinforced Concrete Construction Co. incorporated with \$3000 capital stock by Charles R. Dubois, Eugene Silberman and Elliot Spalding.

Mo., St. Louis—Laundry.—West End Laundry Co. incorporated with \$50,000 capital stock by G. M. Johnson, Frank L. Smith and Robert Dunn.

Mo., St. Louis—Laundry.—West End Laundry Co. incorporated with \$50,000 capital stock by Gabriel M. Johnston, Robert F. Dunn, Michael T. Dunn and others.

Okla., Newkirk—Supplies.—Newkirk Farmers' Supply Co. incorporated with \$3000 capital stock by J. W. Brian, H. E. Bode and Guy Mitchell.

Okla., Oklahoma City—Garage and Flat.—William Ribbe will erect garage and apartment building; two stories; 50x100 feet; cost \$7000.

Okla., Sulphur—Hardware.—Frier Hardware Co. incorporated with \$20,000 capital stock by G. C. Frier, L. H. Frier and M. D. Frier.

Okla., Tulsa—Garage.—F. G. Shaw and associates will erect garage for New State Auto Co.; 50x140 feet.

Okla., Tulsa—Incinerator.—City will probably soon award contract for construction of incinerating plant. Address The Mayor.

Okla., Tulsa—Garage.—Hohman-Snyder Motor Car Sales Co., L. E. Hohman, president, has plans by J. V. Starr, Tulsa, for garage and salesroom recently noted; fireproof construction; brick; 70x75 feet; cost \$10,000.

Okla., Tulsa—Fuel.—Southwestern Fuel Co. incorporated with \$15,000 capital stock; J. B. Porter, Tulsa; B. K. Long, Coffeyville, Kans.; H. L. Russell, Duncan, Okla.

S. C., Columbia—Boat Line.—Columbia & Atlantic Railway & Steamship Co. organized with \$100,000 capital stock by T. C. Williams, E. S. Williams, John A. Woodward and G. W. Halltanger; will establish

boat line from Charleston to Georgetown, S. C.; construct three-mile railway line from some point on Congaree to Main St. in Columbia; erect warehouse.

Tenn., Chattanooga—Laundry.—Crown Laundry awarded contract to T. A. Chambers, 813 Henderson Ave., Chattanooga, for erection of proposed building; first floor to contain laundry; second floor, apartments; two stories and basement; brick; composition roof; concrete floor to basement; hot-water heat; gas and electric lighting; plans by Huntington & Sears, James Bldg., Chattanooga.

Tenn., Memphis—Automobiles and Rubber Goods.—City Auto & Rubber Co. incorporated with \$10,000 capital stock by A. R. Woolen, J. H. DuBose, James T. Dolan and others.

Tex., Beaumont—Garage.—W. A. Decker will erect garage, to be occupied by Beaumont Motor Co.

Tex., El Paso—Publishing.—El Paso Times Co. incorporated with \$100,000 capital stock by F. J. Feldman, C. G. Bayne and Thomas O'Keefe.

Tex., Taylor—Coffee Roasting.—Nalley Grocery Co. of Taylor and Georgetown, Tex., will erect grocery store building and equip with coffee-roasting machinery.

Va., Norfolk—Automobiles.—Seaboard Auto & Storage Co., R. L. Reams, president, recently reported incorporated with \$20,000 capital stock, will conduct repair shop; eight cars daily capacity.

Va., Norfolk—Garage.—Mrs. A. R. Laurence will erect garage; brick; cost \$4000.

Va., Norfolk—Navigation.—People's Navigation Co. incorporated with \$15,000 capital stock; W. S. Fentress, president; J. H. McHorney, general manager.

W. Va., Charleston—Garage.—Graves Hubbard will erect garage; 200x45 feet.

W. Va., Charleston—Laundry.—Empire Laundry Co. incorporated with \$20,000 capital stock by T. H. Williams, A. R. Timberlake, J. H. Stephenson and others.

#### MISCELLANEOUS MANUFACTURING PLANTS

Ala., Birmingham—Pumps.—F. I. Courtland, H. C. Ayerton, M. H. Lisle and W. B. Arrington, all of Chicago, Ill., are considering Birmingham as location for proposed pump plant.

Ala., Birmingham—Neckwear.—J. B. Harrison of Philadelphia, Pa., represents manufacturers of neckwear who are reported as contemplating establishment of plant; may invest \$100,000.

Ark., Fort Smith—Distillery.—W. H. Hughes & Co. leased building and will remodel for distillery; cost \$10,000.

D. C., Washington—Restone.—Restone Company incorporated with \$100,000 capital stock; A. Jackson, president; Y. Burgess, vice-president; H. E. Deckman, secretary-treasurer, 938 I St. N. W.

Fla., Jacksonville—Chemicals.—Diamond Chemical Co. incorporated by W. E. Tyer, Telfair Knight and R. D. Knight, Jr.

Fla., Miami—Germ Exterminator.—American Germ Exterminator Co. incorporated with \$5000 capital stock by J. S. Thrasher, F. A. Jones and John Grambling.

Fla., Tampa—Cigars.—Garcia Bros. & Co. will erect additional buildings.

Ga., Atlanta—Regalia.—Floding Regalia Co. incorporated with \$5000 capital stock by W. R. E. Hard, Edward Floding and J. Harvey Baker.

Ga., Atlanta—Whips.—Dixie Stock Powder & Chemical Co., G. G. Crouch, president, contemplates manufacture of carriage whips, etc. (See "Machinery Wanted.")

Ga., Augusta—Automobiles.—Great Southern Automobile Co. incorporated with \$100,000 capital stock by L. J. Williams, F. W. Edwards and Wallace B. Pierce.

Ga., Augusta—Shirts.—A. A. Gane, Keene, N. H., contemplates establishment of shirt factory.

La., New Orleans—Rendering Plant.—John Alpezza will establish rendering plant.

La., Tallien—Sugar Mill.—Himalaya Planting & Manufacturing Co., J. G. Martel, president, will remodel and make additional improvements to plant; cost \$75,000; L. A. Morel, consulting engineer, Tallien; J. Edward Martel, chief engineer, Tallien; material purchased; construction by company's forces; will install machinery; daily capacity, 1000 tons sugar-cane. (See "Machinery Wanted.")

Md., Baltimore—Brooms, Whisks, etc.—Southwestern Broom Manufacturing Co., Evansville, Ind., will establish branch plant; erect factory building on block between 2d and 3d and Toone Sts.

Md., Baltimore—Artificial Flowers.—Snelberger Company, 101-03 Hanover St., awarded contract to McLaughlin Bros., 915-17 Bolton St., Baltimore, for erection of artificial flower plant at Alsquith and Oliver Sts.; three stories; brick; cost \$25,000.

Md., Lonaconing—Creamery.—C. D. Jones and W. F. Bancroft are promoting establishment of creamery; will erect building; one story; 28x48 feet, with annex 12x28 feet; concrete floor.

Miss., Jackson—Tents, etc.—Camp Furniture & Manufacturing Co., G. B. Downing, president, 315 South Roach St., purchased equipment for proposed plant; will manufacture coats, tents, awnings, etc. (See "Woodworking Plants.")

Miss., Natchez—Pearl Buttons.—G. D. Williams, Davenport, Iowa, is reported as interested in establishment of \$30,000 pearl-button factory.

Mo., Kansas City—Mantles.—Spark Mantle Co. incorporated with \$25,000 capital stock by Charles C. Haslett, C. F. Spark and Robert B. Cannon.

Mo., Kansas City—Hayes Manufacturing Co. incorporated with \$25,000 capital stock by John H. Young, Frank Dye and Harry C. Page.

Mo., Kansas City.—H. R. Ennis is interested in establishment of factory.

Mo., Kansas City—Washers.—Adams Washer Co. (recently reported incorporated with \$20,000 capital stock) will open bids in June or July for erection of building; mill and fireproof construction; cost \$15,000; sheet-metal and woodworking machinery to be installed; cost \$20,000; will manufacture washing machines; M. O. Adams, president-treasurer; F. T. Travers, vice-president-secretary. (See "Machinery Wanted.")

Mo., Kirksville—Gas Plant.—Kirksville Gas Co. will install new gas equipment and gas holder, to double capacity of plant.

Mo., St. Louis—Renovators.—Invincible Renovator Co. incorporated with \$15,000 capital stock by Edward J. Baraba, George T. Moore and Bruce Barnett.

Okla., Chickasha—Cement Burial Vaults.—Chickasha Cement Burial Vault Co. incorporated with \$10,000 capital stock by J. A. Rose, F. M. Frey and E. S. Dougan.

Okla., Enid—Bakery.—W. S. Mitchell will erect bakery.

Okla., Oklahoma City—Stock Food.—Southwestern Stock Food Co. incorporated with \$100,000 capital stock by W. H. Furse, T. Woods and E. V. Robnett.

Okla., Oklahoma City—Window Brackets.—National Window Bracket Co. incorporated with \$10,000 capital stock by Lewis Longbotham, E. Longbotham and Owen V. Hughes.

Okla., Oklahoma City—Granite Works.—Oklahoma Granite & Monument Co. increased capital stock from 25,000 to \$100,000.

S. C., Greenville—Gas Machine, etc.—Greenville Light & Heating Co. organized; C. M. Bauskett, president; J. P. Carlisle, vice president; B. S. H. Harris, secretary; has purchased and is installing machinery to manufacture Speer automatic gas machine in 10 to 500-light machines; offices and factory on Washington St.

S. C., Greenville—Cotton Underwear.—Nuckasee Manufacturing Co. incorporated with \$50,000 capital stock by F. W. Symmes, U. C. Poe, Marion Brawley and David Jennings. (Recently mentioned.)

Tenn., Johnson City—Extract Plant.—United States Leather Co. of New York has not begun construction of proposed extract plant; plans undecided. (Recently incorrectly reported.)

Tex., Dallas—Trucks.—A. G. Stopple, 135 Ross Ave., will establish plant to manufacture heavy floats or freight transfer trucks. (See "Machinery Wanted.")

Tex., Dallas—Oil Refinery.—Climax Refining Co. incorporated with \$100,000 capital stock by J. A. Ballard, A. W. Clem and C. R. Cooper; acquires Climax Oil of Waco, Tex.; San Jacinto Refinery and Richardson-Gay Company of Corsicana, Tex., and Clem-Ballard Oil Co. of Dallas; will operate refinery at Corsicana, with branches at Wichita Falls, Waco, Denison and other Texas cities; offices at Dallas.

Tex., Pilot Point—Garments.—Commercial Club is interested in establishment of garment factory by Oklahoma capitalists with \$30,000 capital stock; plan calls for erection of one-story brick building, 50x100 feet.

Tex., Rockwall—Creamery.—Rockwall Creamery Co. incorporated with \$4850 capital stock by W. D. Austin, H. W. Chandler, T. D. Orr and others.

Tex., San Antonio—Insect Traps.—Universal Insect Trap Co., recently reported incor-

porated (under Corpus Christi) with \$100,000 capital stock, will manufacture traps about four feet high, with lamp attraction, for destruction of boll weevil and other cotton-preying insects; daily capacity, 500 traps; B. E. Adams, president; W. N. Purcell, vice president; P. C. Tumlinson, 213 East Houston St., secretary-treasurer; main office, Corpus Christi; company contemplates having traps made by contract until factory is completed. (See "Machinery Wanted.")

Tex., Taylor—Creamery.—Taylor Creamery Co. organized with \$5000 capital stock; James A. Thompson, president; Hugh Williams, vice-president and general manager; Fred L. Welch, treasurer; Robert A. Williams, secretary.

Tex., Windhorst—Creamery.—Windhorst Creamery Association incorporated with \$8500 capital stock by L. Kertz, Jacob Martini and Henry Osterman.

Va., Buena Vista—Stationery.—Buena Vista Stationery Manufacturing Co. will erect building; 125x40 feet.

Va., Lynchburg—Cotton Gloves.—L. P. Schlemm, Ohio City, O., will, it is reported, establish cotton-glove factory.

Va., Norfolk—Princess Anne Manufacturing Co. incorporated with \$10,000 capital stock; R. W. Waddy, president; J. L. Mills, secretary-treasurer.

Va., Petersburg—Distillery.—Pocahontas Distilling Co. incorporated with \$20,000 capital stock; A. E. Shore, president; P. C. Shore, vice-president, both of Rocky Mount, N. C.; I. C. Shore, secretary-treasurer, of Petersburg.

Va., Richmond—Wearing Apparel.—Baylor-Yarborough Company incorporated with \$15,000 capital stock; J. W. Yarborough, president; L. C. Young, vice-president; G. B. Baylor, secretary-treasurer.

Va., Richmond—Medicine.—Virginia Remedy Co. incorporated with \$50,000 capital stock; I. H. Leoni, president; Morris Davidson, vice-president; P. O. Klipper, secretary-treasurer.

W. Va., Sutton—Extracts.—Tanners & Dyers' Extract Co., Charleston, W. Va., contemplates establishment of additional plant.

W. Va., Petersburg—Bottling.—C. Earl Veach and John A. Parks will establish bottling plant.

W. Va., Moundsville—Enamelware.—United States Stamping Co. will erect two additional buildings; warehouse and shipping department, 160x120 feet, three stories; stamping department, two stories, 200x100 feet; cost \$60,000.

#### RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fla., Jacksonville.—St. Johns River Terminal Co., J. B. Munson, president, Macon, Ga., is arranging to build proposed repair shops; other improvements (purchase of shop property, construction of tracks, paving around freight terminals, reconstruction of river-front track and construction of several industrial tracks, etc.) partly completed; total appropriation for improvements this year is \$250,000, and not \$500,000, as some reports have stated. (Recently reported.)

Ky., Louisville.—Baltimore & Ohio Southwestern Railroad, C. C. F. Bent, general manager, Cincinnati, O., recently incorrectly reported to make terminal improvements.

La., Baton Rouge.—Yazoo & Mississippi Valley Railroad, A. S. Baldwin, chief engineer, Chicago, Ill.; Baton Rouge, Hammond & Eastern Railroad, and Southern Pacific Railway, W. M. Hobbs, general superintendent, New Orleans, La., will, it is reported, erect shops in North Baton Rouge for repair of rolling stock.

Okla., Oklahoma City.—Denver, Kingfisher & Gulf Railroad, J. M. McDonald, president, Kansas City, Mo., will construct shops on tract of 480 acres near Oklahoma City; cost about \$100,000.

Tenn., Livingston.—Livingston Terminal Co. will construct terminal facilities at cost of \$22,000; has begun erection of \$1900 frame station.

Tex., Palacios.—Palacios, San Antonio & Pecos Valley Railway, H. W. Dean, manager, will, it is reported, construct roundhouse, shops and terminal buildings.

#### ROAD AND STREET IMPROVEMENTS

Ala., Attalla.—City awarded contract to Morris & Angel, Sheffield, Ala., at \$8853.50 for construction of 5100 square yards artificial-stone sidewalk and 100 yards driveway; also 7800 feet combined curb and gutter; Hill & Campbell, engineers, Gadsden, Ala. (Recently noted.)

Ark., Little Rock.—City will grade and lay concrete sidewalks and crossings on West 11th and Rice Sts.; bids opened May 4; Guy W. Caron, secretary Board of Commissioners of Improvement District 159, Federal Bldg.

Ark., Little Rock.—City will pave West 6th and Victory Sts. with asphalt; bids to be opened May 14; E. A. Kingsley, City Engineer. (See "Machinery Wanted.")

Fla., Key West.—Board of Public Works has engaged Hazlehurst & Anderson, Atlanta, Ga., to make surveys and prepare plans and specifications for street paving. (Previously mentioned.)

Ga., Macon.—City will pave Cotton Ave. and Forsyth St., from City Hall to College St., with wooden blocks; Forsyth St., from College to Monroe St., with asphalt; College St., from Georgia Ave. to Forsyth St., with bitulithic, vitrified brick in center of street-car tracks; Georgia Ave., from Spring to College St., with bitulithic; 5th St., from Cox & Chappell's to bridge, with granite blocks; Main St., from bridge to Hydroila St., with vitrified brick; Lawley & Co., Chattanooga, Tenn., have contract for brick, granite and wood blocks; Atlantic Bitulithic Co., Richmond, Va., for bitulithic, and Barber Asphalt Co., Louisville, Ky., for asphalt. (Recently mentioned.)

Ky., Lexington.—City contemplates voting in November on issuance of \$300,000 of bonds for street improvements. Address the Mayor.

Ky., Maysville.—City awarded contracts for laying 48,000 feet of cement sidewalks as follows: Brawley Bros., Portsmouth, O., at 13½ cents per square foot for sidewalks on Front, Market, 3d, Limestone and Wall Sts.; Hord & Evans of Maysville, at 13½ cents per square foot on 2d and Sutton Sts.; John Hays of Maysville, at 12 cents per square foot on 4th St.

Md., Betterton.—City voted bonds for construction of concrete sidewalks. Address The Mayor.

Md., Federalsburg.—Caroline county will grade and macadamize .61 mile of road on Bridge St.; bids to be opened May 10; J. L. Dukes, clerk to County Commissioners, Denton, Md. (See "Machinery Wanted.")

La., Leesville.—Ward 1 of Vernon parish voted tax for road and bridge construction. Address Police Jury.

Miss., Agricultural College.—Executive committee will open bids May 17 for construction of macadam road from Starkville to Agricultural College; distance 1½ miles; D. W. Brown, professor civil engineering of A. and M. College, is engineer. (See "Machinery Wanted.")

N. C., Greensboro.—C. G. Wright, C. C. McLean, R. C. Bernau, Marion Cobb and others are promoting construction of macadam road from Raleigh to Greensboro.

N. C., Laurinburg.—City will lay about 2500 square yards concrete sidewalk paving, including curb and gutters; bids will be opened May 23; M. L. John, Mayor. (See "Machinery Wanted.")

N. C., Washington.—City will pave East and West Main and 2d Sts., Market and Water Sts. and Union Al., about 6130 linear feet; bids to be opened May 12; D. B. Packard, City Engineer. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will open bids May 16 for paving Linwood and Classen boulevards, 31st, 28th, 29th and other streets, amounting to about eight miles of street paving; Bob Parman, City Clerk. (Recently mentioned. See "Machinery Wanted.")

S. C., Spartanburg.—Spartanburg county will construct road from Spartanburg to North Carolina line, distance of 36 miles; S. H. Culbreath, County Commissioner.

Tenn., Clarksville.—W. J. Manning & Son of Clarksville have contract to lay 20,000 square feet of concrete sidewalks in "Crestwood," suburb of Clarksville.

Tenn., Lonsdale, R. Station, Knoxville.—City has rejected award of contract to J. J. Connor & Sons of Knoxville for street paving and will soon reaward contract. (Recently mentioned.)

Tenn., Memphis.—City will pave Rayburn boulevard with bitulithic. Address The Mayor.

Tenn., Memphis.—City opened bids April 26 for laying 111,731 square yards tar macadam pavement, 980 square yards gravel pavement and 271,610 square feet of concrete gutters; excavation, 131,775 cubic yards; Ennis M. Douglas, City Clerk.

Tex., Dallas.—City will open bids May 9 for paving Elm St. from Ervay to Market St.; J. B. Winslett, City Secretary. (Recently mentioned. See "Machinery Wanted.")

Tex., Dallas.—City will open bids May 9 for paving Commerce St.; J. B. Winslett, City Secretary. (See "Machinery Wanted.")

Tex., El Paso.—City opened bids May 5 for paving Myrtle Ave. and West Overland St.; Joseph U. Sweeney, Mayor. (Recently mentioned.)

Tex., Galveston.—Galveston county will improve roads along G., H. & H. Railroad and along Santa Fe Railroad; bids to be opened May 16; John M. Murch, County Auditor. (See "Machinery Wanted.")

Tex., Houston.—Harris County Commissioners invite bids until May 13 for paving four miles of Lynchburg and Crosby Rds.; also bids for paving remainder of Seabrook Rd.; John B. Ashe, County Auditor. (Recently mentioned. See "Machinery, etc., Wanted.")

Tex., Maypearl.—Road district, comprising Maypearl and vicinity, will vote June 4 on issuance of \$25,000 of bonds for road construction. Address Ellis County Commissioners, Waxahachie, Tex.

Tex., Palestine.—City will not at present construct paving. (Recently incorrectly noted.)

Tex., Port Arthur.—City contemplates construction of concrete sidewalks. Address The Mayor.

Tex., San Marcos.—Precinct No. 1 of Hays county will vote June 4 on issuance of \$30,000 of bonds for road construction. Address County Commissioners.

Tex., Stamford.—City contemplates bond election for road and street improvements. Address The Mayor.

Tex., Waxahachie.—Justice Precinct No. 2 of Ellis county will vote June 4 on issuance of \$300,000 of bonds for road improvements. Address County Commissioners.

Tex., Waco.—City will open bids May 13 for paving Austin Ave. and two alleys; H. B. Mistrot, Mayor. (Recently mentioned. See "Machinery Wanted.")

Tex., Wichita Falls.—City expects to award contract amounting to \$40,000 in connection with street improvements. Address The Mayor.

Va., Luray.—New Market & Sperryville Turnpike Co. (Clifford G. Bailey and others) contemplates improving road; will construct one mile of macadamized road as object-lesson.

Va., Lynchburg.—Bids will be opened May 10 for construction of 1.6 miles of macadam road on extension of Campbell Ave. toward Campbell, Va.; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Portsmouth.—City will expend \$125,000 this year for street improvements; Bascom Sykes, City Engineer. (Previously mentioned.)

Va., Portsmouth.—Common Council authorized issuance of \$125,000 of paving and street-improvement bonds and \$75,000 of bonds for improvements in Sixth and Seventh wards. Address The Mayor.

Va., Richmond.—City awarded contract to I. J. Smith & Co., Richmond, to pave four blocks surrounding John Marshall high-school building with asphalt block manufactured by Washington Asphalt Block & Tile Co., Capitol and R Sts., Washington, D. C.

Va., Spotsylvania.—Board of Public Roads of Spotsylvania County will open bids May 18 for construction of 14 miles of gravel road in Chancellor District, 19 miles in Courtland District and three-quarters of mile of macadam road in Courtland District; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Spotsylvania.—Bids will be opened May 18 for construction of 20 miles of road in Spotsylvania county; P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; M. W. Thorburn, George W. Perry and others, Board of Spotsylvania County Road Commissioners.

Va., Washington.—Wakefield district of Rappahannock county voted issuance of \$15,000 of bonds for construction of macadamized road from Flint Hill to Warren county line, distance about seven miles. Address County Commissioners.

## SEWER CONSTRUCTION

Ark., Searcy.—City will open bids about May 15 for construction of sewer system; estimated cost, \$30,000; W. S. Shields, engineer, Chicago, Ill. (Recently mentioned.)

Ark., Stuttgart.—City awarded contract at \$17,130.50 to Kress Construction Co., Oklahoma City, Okla., to construct sewer system; system will consist of 1400 feet of 15-inch, 1546 feet of 12-inch, 4945 feet of 10-inch, 19,669 feet of 8-inch, 4390 feet of 6-inch tile pipe sewer, with 118 manholes and 10 flush tanks; also sewage purification works equipped with tank and electric ejectors. (Recently mentioned.)

Fla., Milton.—City voted \$10,000 bond issue for construction of sewer system. Address The Mayor.

Ga., Sylva.—City voted issuance of \$40,000 of bonds for construction of sewer system, electric-light plant and water-works. Address The Mayor.

Ky., Louisville.—Sewerage Commissioners awarded contract to C. T. McCracken & Co., Columbus, O., at \$102,643 for construction of Brook-street sewer, contract No. 62. (Recently mentioned.)

La., New Orleans.—W. J. Hardee, City Engineer, prepared plans and specifications for construction of subsurface drainage system in Morgan Boulevard.

Miss., North Greenwood, P. O. Greenwood.—City will construct sewer system; bids invited. Address The Mayor.

Mo., St. Louis.—Board of Public Improvements, Maxime Reber, president, Room 509 New City Hall, opens bids May 17, 24 and 31 for various sewers of reinforced concrete, brick, etc.; blank forms furnished; plans and specifications on file or copies furnished. (See "Machinery Wanted.")

N. C., Franklin.—City voted issuance of \$20,000 water and sewer bonds. Address The Mayor.

Okla., Lawton.—City voted issuance of \$40,000 of bonds for construction of storm sewer along or near Squaw Creek; Z. M. Selfres, City Engineer. (Recently mentioned.)

Okla., McAlester.—City opened bids May 2 for construction of four district sewers; total length, 9245 feet, and one public sewer 835 feet, all to be eight-inch vitrified tile except 440 feet of eight-inch cast-iron pipe; J. M. Gannaway, City Clerk.

Okla., Oklahoma City.—City will open bids May 9 for construction of various sewers; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Woodward.—City awarded contract to American Light & Water Co., Kansas City, Mo., to construct 13 miles of sanitary sewers; cost \$63,500.

Tex., Port Lavaca.—Andrew and Alfred Nilson of Nilson Bros., Chicago, Ill., will make survey of Port Lavaca Health Ranch and submit proposition for construction of sewer system.

## TELEPHONE SYSTEMS

Ark., Delight.—Delight Telephone Co. organized with W. H. Bowers president, R. W. Stell vice-president, G. M. Powers secretary.

Ark., Scranton.—Scranton Telephone Co., R. B. Chitwood, president, recently reported incorporated with \$4000 capital stock, will construct 35 miles of line connecting Clarksville, Scranton, Prairie View, Dublin, Brown and Paris; will erect \$1200 exchange.

Md., Baltimore.—American Telephone & Telegraph Co. of New York (Chesapeake & Potomac Telephone Co., Baltimore) planning construction of underground conduits from Philadelphia to Baltimore to Washington; distance about 140 miles.

La., Pioneer.—Koerner & Bailey, Oak Grove, La., are interested in establishment of telephone system; construction begun; contemplates extending line to Delhi, La., later, there to connect with long distance.

Mo., Kansas City.—Missouri Kansas Telephone Co. will increase capital stock from \$5,000,000 to \$20,000,000.

Mo., St. Louis.—Abilene Independent Telephone & Telegraph Co. incorporated with \$300,000 capital stock by Stanley A. Jones of Chicago, Ill.; Xenophon Willey, William T. Hardin and others of St. Louis.

Okla., Hobart.—Rainy Mountain Rural Telephone Co. incorporated by W. S. Fleming and others.

Tenn., Harriman.—Tri-County Telephone & Telegraph Co. incorporated with \$10,000 capital stock; will construct and operate telephone lines from Olive Springs to Roane, Anderson, Knox and adjoining counties.

Tex., Dalhart.—Trans-Canadian Telephone Co. organized by D. O. Hazelton and Allen Spain of Rector, Ark.; has franchise to construct telephone line, exchange and fire-alarm system; common battery all cable plant; materials purchased.

Tex., El Paso.—Tri-State Telephone & Telegraph Co. (recently noted organized and to expend \$300,000 for improvements) will construct telephone line to Clint, Tex.; 21 miles long, high-class copper circuit; will also construct toll line into Douglas-Bisbee country.

## TEXTILE MILLS

Ala., Montgomery.—Lace.—American Lace Manufacturing Co., Elyria, O., is reported as contemplating establishment of branch plant.

Ga., Columbus.—Oilcloth.—Meritas Mills

(lately reported incorporated with \$300,000 capital stock) will be organized by Alvin Hunsicker, general manager of Standard Oilcloth Co., 320 Broadway, New York, and associates; plans for mill not fully completed; will manufacture cloth bases for oilcloth; ship to Standard plant for finishing.

Ga., Atlanta.—Cotton Bags.—Fulton Bag & Cotton Mills will build addition to bag department; 60x100 feet; brick; mill construction; cost \$100,000.

N. C., Bessemer City.—Cotton Cloth.—Osage Manufacturing Co. will, it is reported, expend \$75,000 for additional carding machinery, looms, electrical motors, etc.

N. C., Winston-Salem.—Cotton Yarns.—P. H. Hanes Knitting Co. engaged O. A. Robbins of Charlotte, N. C., as engineer for construction and equipment of cotton-yarn mill; one-story building about 500 feet long with monitor roof; 10,000 spindles. (Recently reported.)

Tenn., Morristown.—Hosiery.—C. H. Bacon, manager of Loudon Hosiery Mills, Loudon, Tenn., and J. M. Givens of New York plan organization of \$50,000 stock company to build hosiery mill.

## WATER-WORKS

Ala., Phenix City, P. O. Columbus, Ga.—City will improve pumping system of water-works; plan to construct electric line from Phenix City to pumping station, using alternating current, and install pump and dynamo; Columbus Railroad Co. will pay for electric line and city for pumps and dynamo.

Ark., Searcy.—City will open bids about May 15 for construction of water-works; 60,000-gallon reservoir and tank; cost about \$50,000; W. S. Shields, engineer, Chicago, Ill. (Recently mentioned.)

Ark., Waldron.—City is having plans prepared by E. W. Gantt of Sequoyah Engineering Co., Fort Smith, Ark., for water-works.

Ark., Hartford.—City Council appointed committee consisting of A. B. Colvin, J. E. Boring and W. H. Raine to confer with company which proposes to construct water-works.

Fla., Jacksonville.—City will construct 3,000,000-gallon covered reinforced concrete reservoir; bids to be opened June 6; W. M. Bostwick, Jr., chairman bond trustees. (See "Machinery Wanted.")

Fla., Milton.—City voted \$25,000 bond issue for water-works. Address The Mayor.

Ga., Cairo.—City voted May 2 on issuance of \$9000 of bonds for extension of water-works. Address The Mayor.

Ga., Sylva.—City voted issuance of \$40,000 of bonds for construction of water-works, electric-light plant and sewer system. Address The Mayor.

Md., Baltimore.—City awarded contract at \$14,960 to Charles L. Stockhausen, National Marine Bank Bldg., Baltimore, to erect brick and concrete gatehouse at southeast section of new high-service reservoir, south of Liberty road. (Recently mentioned.)

Md., Baltimore.—Noel Construction Co., U. S. Fidelity & Guaranty Co. Bldg., Calvert and German Sts., Baltimore, is lowest bidder at \$115,000 for erection of pumping station of Fire Department pipe-line system on South, near Pratt St.; Edward D. Preston, Building Inspector. (Recently mentioned.)

Miss., Hazlehurst.—City will expend \$3000 in repairing water-works system; E. M. Cook, Mayor.

Miss., North Greenwood, P. O. Greenwood.—City will construct water-works; bids invited. Address The Mayor.

Mo., Holden.—City will repair concrete and earth dam for water-works system; bids opened May 2; W. G. Thompson, Mayor.

N. C., Asheville.—City will received sealed proposals until May 13 for waterproofing 5,000,000-gallon concrete reservoir. (See "Machinery Wanted.")

N. C., Franklin.—City voted issuance of \$20,000 sewer and water bonds. Address The Mayor.

N. C., Murphy.—City voted issuance of \$25,000 additional water-works bonds. Address The Mayor.

Okla., El Reno.—City is considering purchase of El Reno Water Co.'s plant at \$120,000; if purchased, \$130,000 would probably be expended on extension and service; F. T. Stackpole, City Clerk. (Bond issue of \$250,000 recently noted voted.)

Okla., Francis.—City is negotiating with W. L. Bell, representing Federal Utility Corporation, Kansas City, Mo., for construction of water-works, etc. (See "Ice and Cold-Storage Plants.")

Okla., Lawton.—City voted issuance of \$200,000 of bonds to enlarge water reservoir, erect dam across Medicine Creek and make



necessary connections with pipe line, etc.; also \$40,000 of bonds for construction of water-works extensions within city limits; Z. M. Seifres, City Engineer. (Recently mentioned.)

Okl., Hailleyville.—City Council is considering proposition to lay system of water mains and secure water from plant at Hartshorne, now under construction by O'Neil Engineering Co., Dallas, Tex.

Tenn., Nashville.—Board of Public Works will open bids May 10 for laying 24,435 feet of piping, including 19,940 feet of 6-inch, 725 feet of 8-inch and 3770 feet of 12-inch pipe; greater part of work is to be in West Nashville, with 7240 feet of 6-inch pipe in West End; estimated cost, \$30,000; certified check for \$500 to accompany bids.

Tex., San Antonio.—San Antonio Water Supply Co., Henry Seiple Ames, president, St. Louis, Mo., contemplates improvements to water-works.

Va., Graham.—Graham Water & Electric Co. (recently noted) has not completed organization; filed charter for incorporation with \$25,000 capital stock; details not decided, but will proceed with previously noted plans for furnishing city with water and electric lighting; Jas. F. Dudley to be president; Wm. Mitchell, vice-president; R. B. Williamson, secretary; C. W. Keister, treasurer.

W. Va., Fairmont.—City will vote May 21 on issuance of \$75,000 of bonds for improvement of water-works and construction of bridge; A. G. Martin, Mayor.

W. Va., Keyser.—City will vote May 10 on issuance of \$40,000 of bonds for water-works improvement. Address The Mayor. (Bond issue of \$20,000 recently reported defeated.)

### WOODWORKING PLANTS

Ala., Attalla.—Sash and Doors.—Mr. Hayes will establish sash and door factory to cost \$12,500.

Ark., Harrisburg.—Handle.—J. Holland is arranging to establish plant for manufacturing hickory handles in rough state.

Ga., Cedartown.—Heading.—Cedartown Manufacturing Co. is being organized with \$15,000 capital stock by H. N. Van Devander and R. B. Baker to establish heading plant.

La., Mansfield.—Boxes and Crates.—Logan Lumber Co., J. L. Logan, president, will establish box and crate factory in connection with lumber plant recently mentioned (under "Lumber-Manufacturing Plants"); is building mill of 100,000 feet capacity.

La., New Orleans.—Sash, etc.—Cialborne Ave. Sash Factory Co., Ltd., increased capital stock from \$5100 to \$10,000.

Miss., Jackson.—Cots, etc.—Camp Furniture Manufacturing Co., 315 South Roach St. (recently reported incorporated with \$25,000 capital stock), purchased light woodworking machinery operated by electric motor; will manufacture cots, tents, awnings, etc.; G. B. Downing, president; N. J. Milstead, vice-president; J. Y. Downing, secretary-treasurer; J. N. Young, manager.

Mo., Kansas City.—Vehicles.—Kansas City Vehicle Co. will erect building; concrete and mill construction; cost \$60,000.

Mo., Kansas City.—Sash and Doors.—Western Sash & Door Co., Frederick Huttig, president, will erect factory building to replace present plant.

N. C., Warrenton.—Sash, Doors, etc.—Prigden Manufacturing Co. organized with \$50,000 capital stock by W. H. Prigden, R. B. Boyd, M. P. Burwell and others.

Okl., El Reno.—Furniture.—El Reno Furniture Co. incorporated with \$25,000 capital stock by C. L. Bryson of El Reno, J. M. Polsey and M. C. Brown, both of Columbus, O.

Tenn., Gleason.—Buggies.—Montgomery, Hart & Nichols will establish buggy factory.

Tenn., Jellico.—Welch Stave & Heading Co., Monterey, Tenn., will establish stave plant; J. A. Walker, Monterey, Tenn., will be in charge.

Tenn., Morristown.—Chairs.—J. P. Fort Lumber Co. will establish chair factory; will erect building 40x150 feet; two stories; engine and boiler room of brick, remainder of building frame covered with tin sheeting and roof; cost \$2000; building proposals opened June 1; will install machinery; cost \$5000; daily capacity, 50 chairs. (See "Machinery Wanted.")

Va., Richmond.—Churns, etc.—Cyclone Churn Co. incorporated with \$25,000 capital stock; B. I. Dunlap, president; L. C. Garrett, vice-president; R. W. Gary, secretary-treasurer.

### BURNED

Ala., Birmingham.—Residences of B. S. Latham, W. A. Bowers, L. O. Larson, George Harter and J. C. Sheppard; total loss, \$10,000.

Ala., Opp.—Central Hotel; loss \$5000.

Ala., Mobile.—Earle Macartney's residence at 946 Government St.; loss \$3000.

Ala., Tuscaloosa.—J. S. Free Lumber Co. will rebuild plant reported burned; loss \$1500 to \$2000.

Ala., Tuscaloosa.—J. S. Free Lumber Co.'s plant; loss \$1500 to \$2000.

Ark., Clarendon.—National Cooperage Co.'s drykiln; loss \$20,000 to \$30,000.

Fla., Jacksonville.—Scotland Mills (lumber), on Black Creek; loss \$25,000.

Ga., Douglas.—Douglas Planing Mill's drykiln, office building, etc., owned by G. W. Seymour; loss \$5000.

Ga., East Point.—W. Tom Callahan's printing plant; loss \$1000.

Ga., Pineview.—J. J. Dennard's residence and cotton gin.

La., Loring.—Bowman-Hicks Lumber Co.'s planing mill.

La., Melville.—Strangers' Hotel.

La., Lake Charles.—W. M. Wilson, Lake Charles, La., states residence was not destroyed by fire; recent report incorrect.

Md., Baltimore.—Baugh & Sons Company's fertilizer plant at foot of Clinton St., Canton; loss \$20,000; Calvert and Water Sts.

Miss., Chattanooga.—Bartlett Gravel & Sand Co.'s gravel plant.

Miss., Morton.—Summer Bros.' store; loss \$7000.

Miss., Gulfport.—Mitchell Sash and Blind Factory at Thirtieth Ave. and 21st St.

Miss., Mississippi City.—St. James' Catholic Church; residence owned by Rev. J. E. Chenele, Laurel, Miss.; estimated loss, \$7000.

Mo., St. Louis.—Anheuser-Busch Brewing Association's bottling plant; loss \$250,000.

S. C., Jonesville.—J. N. Littlejohn's residence; loss \$5000.

S. C., Laurens.—Hugh E. Gray's residence; loss \$3000.

Tenn., Memphis.—Memphis Stave Manufacturing Co.'s plant; loss \$7000.

Tex., Acme.—American Cement Co.'s plant; loss \$50,000.

Tex., Ben Arnold.—J. S. Rice's store.

Tex., Brownwood.—H. H. Hardin & Co.'s lumber yards; Harvey Mayes' residence; total loss \$30,000 to \$25,000.

Tex., Naples.—J. J. Shaddis' sawmill, gin, etc.; loss \$80,000.

Tex., Napier.—R. C. Miller's hardwood mill; loss \$10,000.

Tex., Sherman.—Austin College's dormitory, loss \$7500; Tom Meyer's residence, loss \$3000.

Tex., Shepherd.—R. C. Miller Lumber Co.'s hardwood mill; loss \$10,000.

Tex., Sweetwater.—Oriental Hotel; loss \$4000.

Va., Winchester.—Mutual Skating Rink, owned by Harry F. Byrd and Fred L. Glaize; loss \$7000.

Va., Winchester.—Glaize & Bros.' planing mill and lumber yard; loss \$50,000.

W. Va., Glendale.—Wheeling (W. Va.) Metal & Manufacturing Co.'s furnace and dipping departments; loss \$12,000.

W. Va., Union.—A. J. Dixon's roller flour and feed mill; loss \$4200.

W. Va., Sprague.—New River Collieries Co.'s tipples; loss \$15,000.

### DAMAGED BY STORM

Fla., Jacksonville.—Cummer Lumber & Phosphate Co.'s phosphate elevator.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### APARTMENT-HOUSES

Ark., Helena.—Utley & Utley, 329½ Cherry St., Helena, invite subcontractors to bid on heating, plumbing and gasfitting, electric wiring, exterior and interior plastering, concrete foundations, carpentry, lumber, millwork, etc., composition roofing and painting for three-story frame stucco 90-room apartment-house.

D. C., Washington.—Joseph Lavenzo, 1251 9th St. N. W., has plans by Miller & Miller, Evans Bldg., Washington, for apartment-house at 10th and U Sts. N. W.; 75x80 feet; 14 apartments of five rooms and bath each; cost \$30,000.

Fla., Jacksonville.—J. S. Arnold will erect apartment-house; two stories; frame; four flats.

Fla., Jacksonville.—J. S. Arnold will erect apartment-house; frame; 44x76 feet; contain four apartments; cost \$10,000.

La., Morgan City.—Mrs. D. K. Goldman will open bids May 15 for erection of building to contain apartment, stores and offices; cost \$6000. (See "Miscellaneous Structures.")

Md., Baltimore.—R. Watts, North Fulton Ave., is having plans prepared by John R. Forsythe, 232 St. Paul St., Baltimore, for apartment-house at Powhatan Ave. and 18th St.; two stories; frame; 32x96 feet; cost \$10,000; hot-water heat; electric lighting; bids opened May 5.

Mo., St. Louis.—Cunard Realty & Building Co., Samuel J. Coultas, president, purchased site 200x147 feet on which to erect apartment-house to cost about \$50,000.

Mo., St. Louis.—Charles and Mathilda Eggerding purchased site on which to erect single apartment-house.

Mo., St. Louis.—H. Roth will erect apartment-house; cost \$24,000.

Mo., St. Louis.—J. L. Wyland will erect apartment-house; three stories; contain six apartments; cost \$30,000.

Tenn., Knoxville.—H. H. Rice has plans for apartment-house to cost \$20,000.

Tex., El Paso.—Dr. J. Shelton Horsley is having plans prepared for three-story apartment-house to cost \$45,000.

Tex., San Antonio.—T. W. Campbell, Mrs. Harry Gunther and W. A. Wurzbach have plans by Leo M. J. Diekmann of San Antonio for apartment-house and store building; 56x91 feet; five stories; cost \$20,000.

Va., Norfolk.—J. W. Cole will erect brick apartment-house to cost \$13,000.

Va., Norfolk.—East & Hobbs will erect brick apartment-house.

Va., Portsmouth.—E. L. Lash will erect apartment-house; two stories; four apartments; cost \$3500.

### ASSOCIATION AND FRATERNAL BUILDINGS

Ark., Pocahontas.—Odd Fellows, Knights of Pythias, Woodmen of the World and Modern Woodmen lodges are planning to erect lodge building.

Ark., Walnut Ridge.—Arkansas Jurisdiction of Odd Fellows, Louis Joseph, grand chancellor, Little Rock, Ark., will erect \$100,000 sanitarium.

Fla., Inverness.—Masonic Lodge contemplates erection of lodge building; three stories; brick or concrete; 64x50 feet.

Md., Oakland.—Garrett Lodge, Knights of Pythias, F. J. Schroeder, secretary, will erect 45x110-foot building; to contain theater and office; fireproof construction; heating not decided; gas and electric lighting; cost \$6000; architect not selected. (See "Machinery Wanted.")

Miss., Monticello.—Lodge No. 162, Woodmen of the World, will erect two-story lodge building.

Okl., Oklahoma City.—Odd Fellows' Lodge has plans by Layton, Wemyss, Smith & Hawk, Majestic Bldg., Oklahoma City, for lodge building; press brick and stone; five stories; 50x150 feet; gas and electric lights; cost \$90,000.

Okl., Shawnee.—Elks' Lodge, F. P. Stearns, chairman building committee, is having plans prepared by J. D. Bramlett, Postoffice Bldg., Shawnee, for lodge building; three stories; press brick; Carthage stone; structural iron; gas and electric lights; 60x100 feet; cost \$28,000.

S. C., Spartanburg.—Young Men's Christian Association has plans by M. Luther Whiting, Charlotte, N. C., for association building; 12 stories. (Previously mentioned.)

Tenn., Chattanooga.—Odd Fellows' Temple Co., E. N. Shelton, president, 114 East 7th St., will erect proposed lodge, office and mercantile building. (See "Bank and Office Buildings.")

Va., Suffolk.—Suffolk Lodge No. 39, Masons, will erect hall.

### BANK AND OFFICE BUILDINGS

D. C., Washington.—A. F. Fox Company, 14th St. and New York Ave. N. W., has plans by Speiden & Speiden, 1403 New York Ave. N. W., Washington, for office building at 1311 H St. N. W.; steel construction; 25x80 feet; pressed-brick front; marble trimmings; three stories, with basement and sub-basement.

D. C., Washington.—Commercial National Bank, 14th and G Sts. N. W., purchased site adjoining bank building; structure on site will be razed with exception of side walls, and will be converted into extension of bank building; addition will be equipped with vault, elevator and electric plant now in present building.

D. C., Washington.—C. C. Calhoun, 1420 New York Ave., is having plans prepared for

remodeling and enlarging Aston Bldg. at 11th and G Sts. N. W.; structure is to be used for office purposes; estimated cost, \$75,000.

Fla., Monticello.—Jefferson County State Bank will erect bank building.

Ga., Quitman.—First National Bank Building Co. is having plans prepared for bank and office building; six stories; steel construction; electric elevator; top story may be converted into summer roof garden and theater; First National Bank will occupy first floor.

Ga., Elberton.—S. L. Oliver, J. R. and L. D. Mattox and George H. McAnahan will erect office and store building; pressed brick; granite trimmings; steel and plate-glass front; George A. Clayton, Atlanta, Ga., prepared plans and submitted bid.

Ga., Ocala.—Citizens' Bank will erect two or three-story bank building; construction probably not before 1911; estimated cost \$10,000.

Ga., Stillmore.—R. E. Graham will expend \$4000 to erect office and store building recently noted; 42x50 feet; plans not complete.

Ky., Ashland.—John W. Woods will erect two-story office building.

La., Morgan City.—Mrs. D. K. Goldman will open bids May 15 for erection of office building; to contain stores and apartment; cost \$6000. (See "Miscellaneous Structures.")

La., Shreveport.—Hutchinson Bros. invite bids until May 18 for erection of four-story office and store building; certified check, \$1000; plans and specifications on application.

Md., Oakland.—Knights of Pythias, will erect 45x110-foot building; to contain offices, theater and lodge hall. (See "Association and Fraternal Buildings.")

Miss., Georgetown.—Georgetown Bank, I. N. Ellis, president, Hazlehurst, Miss., will erect two-story brick bank building.

Miss., Meridian.—M. W. Wagner has plans by Burt Stuart, Meridian, for office and store building; cost \$10,000. (See "Miscellaneous Structures.")

N. C., Ansonville.—Bank of Anson will erect bank building.

Okl., Oklahoma City.—Union Trust Co. has plans by Wemyss, Smith & Hawk, Majestic Bldg., Oklahoma City, for bank and office building; four stories and basement; gas and electric lighting.

Okl., Skintook.—C. F. Rogers has plans for office and store building; 50x100 feet; pressed brick; stone trimmings; two stories.

Okl., Tulsa.—C. L. Holland has plans by Lee Matthews of Tulsa for office building; three stories; 50x70 feet; pressed brick; stone trimmings; cost \$10,000.

S. C., Eastover.—Farmers and Merchants' Bank, Richard Singleton, president, will expend \$5500 to erect 50x50-foot brick bank building recently noted.

Tenn., Chattanooga.—Odd Fellows' Temple Co., E. N. Shelton, president, 114 East 7th St., will erect proposed office, lodge and mercantile building; 8 or 10 stories and basement; 50x135 feet; fireproof construction; freight and passenger elevators.

Tenn., Chattanooga.—Hamilton Safe Deposit Co., T. R. Preston, president (previously reported organized by Hamilton National Bank with \$400,000 capital stock to erect 12-story bank and office building, has opened building proposals; Allen & Curry, Chamberlain Bldg., Chattanooga, lowest bidders; reported that bidders may revise figures; plans by R. H. Hunt, Chattanooga; plans for steel frame by Purdy & Henderson, New York; W. Dunbar Jenkins, engineer in charge.

Tex., El Paso.—R. D. Martin will erect office building.

Tex., Quanah.—L. Simpson will expend \$20,000 to erect bank and office building; 25x115 feet; ordinary construction; Campbell's gravity system of heating; electric lighting; plans by A. Moffat, Mountain Park, Okla.; day work; no material needed. (Noted in February.)

Tex., Kingsville.—St. Louis, Brownsville & Mexico Railway, E. C. Burgess, engineer, will erect office building to cost \$45,000.

Tex., Kerrville.—First State Bank will erect bank building.

Tex., Waco.—Amicable Life Insurance Co., Artemus Roberts, president, will have plans prepared by Sanguinet & Staats of Fort Worth, Dallas, Houston and San Antonio, Tex., for office building recently noted; 29-story structure; 50x105 feet; cost \$500,000 complete; plans probably ready in 60 days; preliminary plans not yet decided.

W. Va., Charleston.—Kanawha & Michigan Railway, F. B. Shelton, chief engineer, Columbus, O., is having plans prepared, it is reported, for office building.

## CHURCHES

Ala., Bessemer.—First Methodist congregation, Rev. J. T. Sturdivant, pastor, will erect edifice to cost \$50,000; structure to be 96x140 feet; Bedford stone; plans by P. J. La Belle, 328 Hood Bldg., Birmingham, Ala.; will be ready for bids June 1. Address architect.

Ala., Birmingham.—North Birmingham Presbyterian congregation will erect edifice and Sunday-school building. Address The Pastor, North Birmingham Presbyterian Church.

Ala., Ensley.—Methodist Church, Dr. J. D. Simpson, pastor, Avenue G and 20th St., will complete edifice; estimated cost, \$30,000.

Ala., Montgomery.—Central Presbyterian Church, Rev. W. P. Neilson, acting pastor, purchased site, 147x220 feet, for \$3000 on which to erect edifice.

Ark., Van Buren.—First Methodist congregation will erect edifice. Address The Pastor, First Methodist Church.

D. C., Washington.—First Church of Christ, Scientist, 15th and R Sts. N. W., has plans for edifice at Euclid St. and Columbia Rd.; marble and terra-cotta; cost \$100,000.

Fla., St. Augustine.—First M. E. Church, Rev. C. C. Cecil, pastor, will erect edifice.

Ga., Covington.—Methodist congregation will remodel main church building and erect Sunday-school room annex; addition will be 23x100 feet and contain 18 classrooms. Address The Pastor, Methodist Church.

Ky., Georgetown.—Baptist Church has plans by E. M. Stamler, Lexington, Ky., for Sunday-school addition and enlargement of auditorium; 40x45 feet; two stories; brick; ordinary construction; steam heat; cost \$5500.

Ky., Danville.—Christian Church will have plans prepared by George W. Kramer of New York for edifice to cost \$50,000.

Ky., Paris.—Methodist Church accepted plans by S. E. Desjardins, Cincinnati, O., for edifice to cost \$20,000; Henry A. Power, chairman building committee.

La., Lake Charles.—Catholic congregation will rebuild edifice recently reported burned at loss of \$30,000. Address The Pastor, Catholic Church.

La., New Orleans.—St. Charles Avenue Baptist Church, Rev. W. H. Brengle, pastor, will erect Sunday-school building to cost about \$7000.

Miss., Corinth.—Waldron Street Christian congregation will erect edifice to cost about \$5000. Address The Pastor, Waldron Street Christian Church.

N. C., Spring Hope.—Methodist congregation will erect edifice. Address The Pastor, Methodist Church.

Okl., Blackwell.—Methodist Episcopal congregation will erect edifice to cost \$25,000. Address The Pastor, Methodist Episcopal Church.

Okl., Purcell.—First Christian Church has plans by A. H. Humphrey, Oklahoma City, Okla., for edifice to cost \$6000.

Okl., Purcell.—Methodist Episcopal Church South has plans by Smith & Parr, Oklahoma City, Okla., for edifice to cost \$10,000.

S. C., Greenwood.—Methodists of West End Chapel, Rev. W. H. Murray, pastor, will erect edifice to cost \$10,000.

S. C., Greenwood.—Baptist congregation contemplates improving edifice at cost of \$20,000. Address The Pastor, Baptist Church.

S. C., St. Matthews.—Baptist congregation contemplates erecting edifice. Address The Pastor, Baptist Church.

Tenn., Gallatin.—Church of Christ will erect edifice. Address The Pastor, Church of Christ.

Tenn., Knoxville.—Church Street M. E. Church South has plans for edifice; seating capacity, 500; B. W. Akers, J. G. Cannon and others comprise committee.

Tex., El Paso.—Catholic congregation contemplates erection of church building, school building, rectory and convent, expending about \$200,000. Address The Pastor, Catholic Church, East 3d St.

Tex., Sweetwater.—Baptist congregation will erect \$20,000 brick edifice. Address The Pastor, Baptist Church.

Va., Harrisonburg.—Methodist Church, Rev. Homer H. Sherman, pastor, purchased site 106x252 feet on which to erect edifice.

Va., Petersburg.—Orthodox Hebrew congregation purchased site on which to erect synagogue. Address The Rabbi, Orthodox Hebrew Church.

Va., Richmond.—Clifton Street congregation is completing plans for erection of proposed edifice. Address The Pastor, Clifton Street Church.

Va., Salem.—St. Paul's Episcopal congregation

will soon award contract for erection of edifice. Address The Pastor, St. Paul's Episcopal Church.

## COURTHOUSES

Tex., Gainesville.—Bids will be received until May 16 at office of C. R. Pearman, County Judge, for erection of three-story-and-basement fireproof courthouse; plans and specifications prepared by Lang & Witchell, Dallas, Tex., and Garrett & Collins, Gainesville, associate architects; separate bids will be received for plumbing, heating and wiring; estimated cost of building complete, \$135,000; contractor is required to deposit check for \$25 with architects to secure plans and specifications; certified check for 5 per cent. of bid to accompany proposals; plans on file with architects.

Va., Hampton.—Elizabeth City County Board of Supervisors will erect two-story addition to courthouse; lower floor to be used as clerk's office, and will contain fire and burglar-proof vault; estimated cost, \$10,000; bids will be opened May 18; Harry H. Holt, Clerk of Courts.

## DWELLINGS

Ala., Birmingham.—L. T. Beecher has plans by Warren & Welton, Birmingham for residence in Graymont; 35x40 feet; English hatched roof style; two Della Robbia panels on each side; cost \$7500.

Ala., Birmingham.—W. T. Simmons has plans by W. C. Weston, 1114 Brown-Marx Bldg., Birmingham, for dwelling; nine rooms; brick veneer; cost \$15,000; P. O. Randall, constructing engineer, Birmingham, in charge of construction.

Ala., Birmingham.—Oscar R. Hundley will erect residence.

Ark., Helena.—Utley & Utley, 329½ Cherry St., Helena, invite subcontractors to bid on heating, plumbing and gasfitting, electric wiring, exterior and interior plastering, concrete foundations, carpentry, lumber, millwork, etc., composition roofing and painting for three-story frame and stucco 18-room dwelling; also 2½-story residence. (See "Machinery Wanted.")

Ark., Little Rock.—Walter F. Reichardt will erect residence; two stories; first story granite; second story granite veneer; cost \$2500.

D. C., Washington.—Warren F. Brenizer, 141 Q St. N. W., will erect residence on Columbia Rd. near 18th St.

D. C., Washington.—O. G. Staples, proprietor of Riggs House, will erect 25 dwellings at 15th and H Sts. N. E.; cost \$5000 to \$7000 each.

D. C., Washington.—Richard T. Mulligan, 1432 M St. N. W., is having plans prepared by J. H. De Sibour, Hibbs Bldg., Washington, for \$40,000 residence.

D. C., Washington.—Clark Waggaman, 2600 Connecticut Ave. N. W., will erect residence on R St. N. W., between 18th and 19th Sts.

D. C., Washington.—W. B. Mason, 1219 Connecticut Ave. N. W., will erect residence on R St. N. W., between 18th and 19th Sts.

D. C., Washington.—Josiah A. Van Orsdel, 2500 Ontario Rd. N. W., will erect residence at Columbia Rd. and Wyoming Ave.

D. C., Washington.—Charles A. Peters, 625 14th St. N. E., has plans by A. H. Beers, 1333 G St. N. W., Washington, for 13 two-story dwellings at 1815-1821 Allison St. and 4226-4442 Kansas Ave. N. W.; two stories; brick; cost \$32,500; construction by owner.

Fla., Jacksonville.—J. S. Halsema will erect two-story frame dwelling.

Fla., Tampa.—W. W. Hooper will erect residence.

Ga., Hawkinsville.—Walter Merritt will erect residence.

Ky., Paris.—F. J. Savage will erect residence; two stories; frame; cost \$3000.

La., Lake Charles.—Immaculate Conception Church, Rev. H. Cramer, rector, will rebuild rectory recently reported burned. (See "Schools.")

La., New Orleans.—Hamilton P. Jones will erect residence.

Md., Baltimore.—Henry Geldt, 2103 East Preston St., will erect residence on Chapanoke Rd.; two and a half stories; frame.

Md., Baltimore.—Martin Meyer has plans by Louis Levi, American Bldg., Baltimore, for residence at Main and Oakfield Aves.; two and a half stories; frame and stucco; cost \$6000.

Md., Baltimore.—John L. Becker, 1900 East Pratt St., is having plans prepared by H. J. Tinley, 314 North Charles St., Baltimore, for residence; three stories; brick; cost \$10,000; dwelling to be 32x45 feet; hot-water heat.

Md., Baltimore.—Mrs. William M. Ellicott, St. Paul and Madison Sts., is having plans prepared by Ellicott & Emmart, Union Trust Bldg., Baltimore, for improvements to dwelling; cost \$13,000.

Md., Baltimore.—Barney Goldstein, 237 North High St., purchased site on Reisters-town Rd.; 300x120 feet; will erect two-story semi-detached dwellings; cost \$2500 each.

Md., Baltimore.—Mrs. Lela L. Lane, 421 East Chase St., will erect cottage at Beach Ave. and 12th St.

Md., Baltimore.—Maurice Gumenick, 1431 East Fayette St., will erect 16 dwellings on Brighton St.; 14x48 feet; two stories; brick; cost \$32,000.

Md., Baltimore.—James D. Downes, 718 North Monroe St., will erect cottage on Carlisle Ave.; 50x150 feet.

Md., Baltimore.—New Era Realty Co. of Philadelphia, Pa., purchased site at Brighton and Baker Sts. and will expend \$100,000 for erection of two-story brick dwellings.

Md., Baltimore.—L. P. Temple, 415 Equitable Bldg., has plans by B. W. Blake, 329 East 22d St., Baltimore, for cottage on Main Ave., Forest Park; two and a half stories; frame and stucco; cost \$6000; structure to be 45x50 feet; 12 rooms; ordinary construction; hot-water heat; gas and electric lighting; bids opened May 10. Address architect. (See "Machinery Wanted.")

Md., Baltimore.—New Era Realty & Construction Co., Highland Ave., will erect eight dwellings on 7th St.; cost \$17,500.

Miss., Houston.—Mrs. O. C. Ehrlick is having plans prepared by M. M. Alsop, Itta Bena, Miss., for dwelling; cost \$2000.

Miss., Itta Bena.—G. R. Mahoney is having plans prepared by M. M. Alsop, Itta Bena, for six dwellings; cost \$3000 each.

Mo., Kansas City.—Harry F. Wunderlich will erect residence.

Mo., St. Louis.—George E. Williams will erect dwelling.

Mo., St. Louis.—Hugo Deutmann will erect bungalow.

Mo., St. Louis.—Robert F. Miller will erect block of dwellings in Grand Kingshighway Park.

Mo., St. Louis.—William Degenhardt will erect \$7000 bungalow.

Mo., St. Louis.—St. Mark's Church will erect two-and-a-half-story dwelling; cost \$12,000. Address The Pastor, St. Mark's Church.

N. C., Alexis.—Jack Stroup will erect residence.

N. C., Asheville.—Mrs. O. C. Hamilton has plans by R. S. Smith for residence; concrete construction.

N. C., Belmont.—R. S. Armstrong will erect residence.

N. C., Belmont.—A. C. Lineberger, Tuskegee, N. C., will erect residence.

N. C., Gastonia.—Mrs. E. C. Wilson will erect residence.

N. C., Greensboro.—Trustees Grace M. P. Church will expend \$2500 to erect eight-room parsonage recently noted; ordinary frame construction; heating not decided; architect not selected.

Md., Baltimore.—C. Frank Jones, 1744 West North Ave., has plans by Stanislaus Russell, Clifton Ave. and 7th St., Baltimore, for addition to residence at 1755 West North Ave.; three stories; brick; 16x20 feet; cost \$3000.

Md., Baltimore.—Howard Realty Co., 315-17 Gaither Bldg., has plans by Stanislaus Russell, Clifton Ave. and 7th St., Baltimore, for six dwellings on Clifton Ave.; two stories; brick; 15x60 feet; cost \$20,000.

Md., Baltimore.—Charles R. Diffenderfer, 1731 North Charles St., has plans by Owens & Sisco, 1605 Continental Trust Bldg., Baltimore, for improvements to residence; cost \$15,000.

Md., Ellicott City.—E. M. Gillet, New Cut Rd., has plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore, Md., for improvements to dwelling on Winters farm; cost \$6000.

N. C., Mt. Holly.—C. E. Hutchinson will erect residence.

Okl., Oklahoma City.—L. L. Land, 407 East Park Pl., has plans by Layton, Wemyss, Smith & Hawk, Majestic Bldg., Oklahoma City, for residence; two stories; press brick and stone; gas and electric lights; cost \$10,000.

Okl., Oklahoma City.—O. P. Workman has plans by Layton, Wemyss, Smith & Hawk, Majestic Bldg., Oklahoma City, for residence; two stories; press brick and stone; gas and electric lights; cost \$12,000.

Okl., Oklahoma City.—C. Ames has plans by Layton, Wemyss, Smith & Hawk, Majestic Bldg., Oklahoma City, for residence; two stories; reinforced concrete, stone and terra-

cotta trimmings; gas and electric lights; cost \$50,000.

Tenn., Chattanooga.—S. T. Dewees, 819 Market St., is having plans prepared by D. V. Stroop, James Bldg., Chattanooga, for dwelling in Riverview.

Tenn., Chattanooga.—Dr. Raymond Wallace is having plans prepared for proposed dwelling.

Tenn., Chattanooga.—W. C. Johnson, manager of Chattanooga News, will, it is reported, erect dwelling on Mission Ridge.

Tenn., Humboldt.—H. J. Foltz will rebuild dwelling previously reported burned; 40x18 feet; two stories and basement; hot-water heat; slate and galvanized shingle roof; cost \$4000.

Tenn., Memphis.—James E. Stark will erect residence; cost \$15,000.

Tenn., Memphis.—John M. Prichard will erect residence.

Tenn., Memphis.—J. B. Wyckoff will erect residence in Goodbar.

Tenn., Memphis.—D. T. Patrick will erect residence.

Tenn., Morristown.—T. H. Reeves will erect cottage.

Tenn., Nashville.—J. S. Campbell will erect residence; brick veneered; cost \$3000.

Tenn., Nashville.—M. Petrone will erect brick store and dwelling; cost \$6000.

Tex., Palestine.—J. W. Link is having plans prepared by H. C. Banker, Orange, Tex., for residence; face brick; reinforced concrete floors; estimated cost \$40,000.

Tex., Palestine.—J. C. Stillman will erect brick dwelling; hardwood floors; slate roof; hot-air heat; electric and gas lighting; building to be 50x50 feet; two stories, attic and basement; slag roof; metal lath; plaster interior; concrete foundation; cost \$10,000.

Tex., Waxahachie.—O. H. Chapman will open bids June 1 for erection of 10-room dwelling recently noted burned; two stories; ordinary construction; cost \$3000.

Tex., Westhoff.—G. H. Fishbeck, Moulten, Tex., will erect residence.

Va., Fredericksburg.—W. W. Butzner will erect residence; plans in progress.

Va., Louisa.—Charles A. Douchill and John W. Surbrug of New York leased Parramores Point, and will erect bungalows for gunners.

Va., Norfolk.—S. R. Nicholls has plans by B. F. Mitchell, Norfolk, for residence; frame.

Va., Norfolk.—Charles F. Burroughs has plans by Ferguson, Calrow & Taylor, Norfolk for residence; brick and stone; cost \$30,000 to \$35,000.

Va., Richmond.—W. W. Timberlake will erect residence in Ginter Park.

Va., Richmond.—G. B. Mountcastle will erect residence in Ginter Park.

Va., Richmond.—Eva K. Melton will erect six frame dwellings.

Va., Richmond.—St. Andrew's Association will erect double brick tenement; cost \$5000.

Va., Richmond.—B. H. Melton will erect dwelling; brick; cost \$3000.

W. Va., Bluefield.—Washington Realty Co., Washington, W. Va., will grade streets and sidewalks and erect dwellings.

## GOVERNMENT AND STATE BUILDINGS

Miss., Meridian.—Hospital.—Trustees for East Mississippi Insane Hospital, J. M. Harwell, secretary, invite plans and specifications for male college until May 1. For particulars address Dr. J. M. Buchanan, superintendent.

Mo., Carrollton.—Postoffice.—Treasury Department, Office of Supervising Architect James Knox Taylor, Washington, D. C. Sealed proposals will be received until June 2 for construction (including plumbing, gas-piping, heating apparatus, electric conduits and wiring) of U. S. postoffice, in accordance with drawings and specification, copies of which may be had from custodian of site at Carrollton or at this office, at discretion of architect.

N. C., Kitty Hawk.—Life-saving Station.—Treasury Department, U. S. Life-Saving Service, Washington, D. C. Proposals will be received until May 17 for construction of two life-saving stations, one at Chicamacomico, N. C., and other at Kitty Hawk; specifications and drawings, form of proposal, etc., can be obtained upon application to Superintendent of Seventh Life-Saving District, Shawboro, N. C.; Superintendents of Construction of Life-Saving Stations, 379 Washington St., New York city, or to above office; S. I. Kimball, General Superintendent.

Okl., Enid.—Postoffice, etc.—Thomas Livellson, San Antonio, Tex., is lowest bidder at



\$111,708 for erection of United States post-office and courthouse; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

Okl., Pryor—Orphans' Home.—State Board of Public Affairs, R. J. Allen, chairman, will receive proposals until May 16 for erection of two cottages, power-house, installation of heating, plumbing and electric light and power for Oklahoma State Orphan Home at Pryor Creek, Okla., in accordance with plans and conditions of specifications prepared by P. H. Weathers, Guthrie, Okla., supervising architect of State Board. Plans and specifications may be seen at office of B. F. Lee, superintendent, at Pryor Creek; of State Board of Public Affairs and of supervising architect; proposals to be submitted on forms prepared and furnished by supervising architect. Bids will be received for entire work, including buildings and all installation combined, and also on cottages, power building, steam heat, electrical work and sewerage, each separately; certified check equal to 5 per cent. of total amount of highest proposal submitted by bidder; bids to be addressed to T. A. Chandler, acting secretary, Guthrie. (Previously mentioned.)

Tex., Austin—Insane Asylum.—Bids opened by State Lunatic Asylum Board at office of Dr. Preston May 5 for construction of additions to buildings at State Lunatic Asylum according to plans and specifications by C. H. Page & Bro., architects, Austin; also for plumbing, heating and electric wiring.

Tex., Fort Sam Houston.—War Department, Washington, D. C., will let contracts June 30 for construction of additional cavalry and artillery barracks, involving expenditure of \$175,000; quarters to be augmented to accommodate full regiment of each branch; pumping and ice plant, laundry and accommodations for machine gun platoon also provided for; Tilman Campbell, constructing quartermaster. (Previously noted.)

### HOTELS

Ark., Little Rock.—Will Hoffman, 1220 West 2d St., will erect hotel and store building recently mentioned; 45 to 60 rooms; ordinary construction; size 240x75 feet; 8 storerooms; plans being prepared; construction by owner; cost \$25,000 to \$30,000.

Ark., Marianna.—Marianna Hotel Co. organized with \$25,000 to erect three-story hotel; W. S. McClintock, president; J. R. Jarratt, vice-president; F. N. Burke, secretary, and H. I. Dixon, treasurer.

Ga., Augusta.—S. J. Newcomb and J. A. Newcomb have leased Albion Hotel and will expend \$20,000 in improvements.

Md., Baltimore.—Henry J. Tinley, 314 North Charles St., Baltimore, is preparing plans for improvements to Waldorf Hotel at Charles St. and North Ave.; interior to be rearranged and elevator installed.

Miss., Jackson.—C. Jones contemplates rebuilding burned Norville Hotel; new structure to be six or seven stories high.

Miss., Vicksburg.—George L. Keene, Savannah, Ga., leased Hotel Carroll from Herman estate; structure will be enlarged.

Mo., Columbia.—Judge John A. Stewart, promoter, should be addressed relative to proposed \$100,000 fireproof hotel; S. F. Conley (solicitor) and others were recently noted interested in organization of company; project not definite.

Mo., Kansas City.—James Ketner, proprietor Densmore Hotel, leased site 91x131 feet adjoining hotel on which to erect 150-room addition, costing \$175,000.

N. C., Greenville.—A. A. Gates, Hendersonville, N. C., has plans for hotel; five stories; reinforced concrete; 100x100 feet; 125 bedrooms, assembly hall, etc.; cost \$200,000.

Okl., Hugo.—C. L. Webb will erect three-story hotel.

Tex., Corpus Christi.—J. C. Scott will erect four-story brick hotel to cost \$125,000 on site of Seaside Hotel.

Tex., Stamford.—J. R. Cargill is having plans prepared by S. B. Elliott, Stamford, for building. (See "Miscellaneous Structures.")

Tex., Sweetwater.—Beall & Beall are promoting erection of three-story brick hotel.

Va., Roanoke.—Shenandoah Hotel Co. opened bids for erection of annex to Shenandoah Hotel; C. D. Keffer of Roanoke is lowest bidder at \$30,000 for erection of two-story building and at \$37,000 for erection of three-story building.

### MISCELLANEOUS STRUCTURES

Ala., Birmingham.—Store.—Ramsay & McCormack will erect store at 1801 Avenue E; two stories; brick; cost \$5000; will also ex-

pend \$4000 for improvements to building at 1801 Avenue E.

Ala., Birmingham.—Store.—Lane & Hinkle will erect store building; two stories; brick; cost \$5000.

Ark., De Witt.—Store.—T. J. Davis will erect store; brick; 50x80 feet; plate-glass front; one story.

Ala., Ensley.—Business.—Ensley Company will erect two business building; two stories; brick.

Ala., Ensley.—Store.—Avery's Pharmacy will expend \$12,000 for enlarging and remodeling store building; plate glass and marble front.

Ala., Tuscaloosa.—Stores.—R. H. Little will erect several stores.

Ala., Tuscaloosa.—Stores.—C. B. Verner will erect two stores.

Ark., Little Rock.—Will Hoffman, 1220 West 2d St., is having plans prepared for hotel and store building to contain eight storerooms; cost \$25,000 to \$30,000. (See "Hotels.")

Ark., Little Rock.—Store.—Gus Blass Dry Goods Co. will erect department store.

Ark., Perla.—Malvern Lumber Co. will rebuild commissary and office building recently reported burned; brick or concrete; cost \$4000.

D. C., Washington.—Business.—H. R. Howenstein Company, 1314 F St. N. W., has plans by H. A. Bright, 622 Maryland Ave., Washington, for seven buildings on South Carolina Ave.; two stories; brick; cost \$17,000.

D. C., Anacostia, Station H.—Store.—Spungard & King, Evans Bldg., Washington, D. C., have plans by Miller & Miller for three stores.

Fla., Jacksonville.—Store.—Cohen Bros. are having plans prepared by H. J. Klutho, Jacksonville, for department-store building; four stories; 210x315 feet; reinforced concrete; brick and terra-cotta finish; total floor space of 264,000 feet; four passenger and one freight elevators. (Previously mentioned.)

Fla., Kissimmee.—Business.—J. M. Miller will rebuild business building recently burned; 30x70 feet.

Fla., Kissimmee.—Business.—J. W. Miller contemplates rebuilding structure recently burned; fireproof construction; brick.

Fla., Kissimmee.—Stores.—D. Rotundo has plans prepared by M. Kelly, Kissimmee, for rebuilding two store buildings recently burned; 70x25 feet; semi-fireproof construction; cost \$3500. (See "Machinery Wanted.")

Fla., Kissimmee.—Business.—John Benman will rebuild business building recently burned; 30x60 feet.

Fla., Key West.—Jail.—Monroe County Commissioners will receive bids addressed to E. W. Russell, Clerk of Circuit Court, until June 15 for erection of addition and repairs to jail; certified check for 5 per cent. amount of bid, payable to J. R. Curry, chairman; plans and specifications on file at office of Mr. Russell.

Ga., Cordele.—Business.—G. L. Decker & Bro. will expend \$12,000 to erect business building recently noted; 50x100 feet; three stories; freight elevator.

La., Alexandria.—Grandstand.—J. F. Letton will soon award contract for erection of grandstand; 600 feet long; to seat 5000 people.

La., Lake Charles.—Business.—John Storer contemplates rebuilding business building recently reported burned.

La., Morgan City.—Stores.—Mrs. D. K. Goldman will open bids May 15 for erection of building to contain stores, offices and apartment; 50x90 feet; plate-glass front; pressed brick; steel ceiling; composition roof; concrete floor; cost \$6000; plans by P. B. Ghirardi, Morgan City.

La., Morgan City.—Business.—J. J. Goldman will erect business building; two stories; brick.

La., New Orleans.—Ephraim Rosenberg is having plans prepared by Keenan & Wells, 418 Hibernia Bldg., New Orleans, for store building; 35x140 feet; semi-mill construction; sanitary flooring; fire-protective devices; pressed-brick front; prism-glass transoms; cost \$15,000. Address architects.

Md., Baltimore.—Labor Temple.—Federation of Labor, 1011 East Baltimore St., Edward Hirsch, president, is considering erection of labor temple. Address Robt. E. Lee, attorney, Gaither Bldg., Baltimore.

Md., Havre de Grace.—Store.—John N. Spencer will erect store; three stories and basement; brick; 30x50 feet.

Md., Hagerstown.—Business.—Schindel, Rohrer & Co. will erect business building; four stories.

Miss., Meridian.—Store.—M. W. Wagner has plans by Burt Stuart, Meridian, for store

and office building recently noted; 25x65 feet; three stories; cost 10,000.

Mo., Fredericktown.—Store and Office.—Matthews & Clarke, Missouri Trust Bldg., St. Louis, preparing plans for store and office building; 60x82 feet; press brick and Carthage stone; ornamental and architectural iron; electric fixtures.

Miss., Columbia.—Store.—Walker Bros. will erect two-story brick store building; 30x100 feet; brick; cost \$5000; plans by Heath Bros., Gulfport, Miss.

Mo., Kansas City.—Business.—B. H. Wheeler will erect business building; two stories; brick and concrete; 44x141 feet; cost \$18,000.

Mo., Kansas City.—Clubhouse.—Kansas City Athletic Club will erect clubhouse.

Mo., St. Charles.—Natorium.—St. Charles Natorium is having plans prepared by Klipstein & Rathmann, Chemical Bldg., St. Louis, for natorium; press brick and Carthage stone; electric lighting; shower baths, etc.; cost \$12,000.

N. C., Asheville.—Fair Buildings.—Jackson County Fair Association organized with \$5000 capital stock; Thos. A. Cox, president; Geo. P. Miller, vice-president; M. Buchanan, treasurer; A. J. Dills, secretary; will award contracts for erection of fair buildings, etc.

N. C., Charlotte.—Orphanage.—Thompson Episcopal Orphanage, Mrs. Vinton Liddell, president, will expend \$100,000 for improvements, including erection of \$30,000 administration building and several \$5000 cottages; stone and brick; electric lights, etc.

N. C., Goldsboro.—Hospital.—Goldsboro Hospital, Geo. C. Royal, chairman, will open bids July 1 for erection of hospital recently noted; 45x120 feet; ordinary construction; steam heat; electric lighting; cost \$20,000; plans by H. E. Bonitz, Wilmington, N. C. (See "Machinery Wanted.")

Okl., El Reno.—Market.—Choctaw Meat Market will erect building; one story; construction to permit erection of two additional stories; white enamel brick front; maple floor laid on concrete base; prism lights; plans by J. W. Vogel, 3-4 Opera-house, El Reno.

Okl., Enid.—L. W. Cotton has plans by Roy Shaw, Enid, for business building recently noted; 35x100 feet; mill construction; hot-water heat; electric lighting; cost \$7000; bids opened May 6.

Okl., Enid.—Business.—John W. Shuttler, Kingsher, Okla., will erect business building; two stories; 25x60 feet.

Okl., Enid.—Business.—Gannon & Goulding will erect five-story business block; 75x150 feet.

Okl., Hugo.—Business.—Overstreet & Collins will erect business building; two stories; double; brick; cost \$14,000.

Okl., Hugo.—Business.—Fuller Bros. will erect brick business building.

Okl., Pawhuska.—Business.—Tom Smith, Muskogee, Okla., will erect business building; three stories; brick.

Okl., Skiatook.—Business.—C. G. Eaton will erect business building; two stories; brick; 25x50 feet.

Okl., Tulsa.—Business.—George W. Groves has plans by Oklahoma Architectural Co., Oklahoma City, for business building recently noted; brick; gas and electric lighting; cost \$5000.

S. C., Florence.—Business.—James D. Evans will erect business building; three stories; brick.

S. C., Hartsville.—Recreation Building.—Hartsville Cotton Mill will erect recreation building for operatives; three stories; steam heat; electric lights; water-works; shower baths; auditorium; assembly hall to seat 350 people, etc.

Tenn., Chattanooga.—Odd Fellows Temple Co., E. N. Shelton, president, 114 East 7th St., will erect proposed mercantile, lodge and office building. (See "Bank and Office Buildings.")

Tenn., Nashville.—Store.—Mrs. John Hill Eakin will erect double brick store building; cost \$5000.

Tenn., Nashville.—Gymnasium, etc.—Methodist Episcopal Church South will erect building in connection with Warlike Settlement work; will contain gymnasium, baths, etc.; cost \$8000. Address The Pastor, Methodist Episcopal Church South.

Tex., Abilene.—Alexander Sanitarium in incorporated with \$50,000 capital stock by J. M. Alexander, J. M. Estes and A. P. McLemore.

Tex., El Paso.—El Paso Electric Railway will expend \$11,000 for erection of car barn; capacity, 80 cars.

Tex., Edgewood.—Store.—H. M. Millsap has plans by R. M. Ferguson, Edgewood, for store building; brick; 48x120 feet; two plate-glass fronts; cost \$5000.

Tex., El Paso.—Store.—Silberberg Bros. will expend \$5000 for improvements to first floor of Van Blarcom Bldg., including plate-glass front.

Tex., Houston.—Store.—Foley Bros. leased building and will make improvements.

Tex., Houston.—Business.—Bering-Cortez Hardware Co. is having plans prepared by Sanguinette & Staats, Houston, for business building; six stories; reinforced concrete; outer finish buff or gray pressed brick; frontage 75 feet; three electric elevators; power plant in basement; electric lights; fire-screens at each window and metal doors on each floor; cost \$75,000. (Previously mentioned.)

Tex., San Antonio.—Sanitarium.—Tallman Sanitarium Co. incorporated with \$20,000 capital stock by W. L. Tallman, E. H. Terrell and J. T. Wilson.

Tex., Stamford.—Stores.—J. R. Cargill is having plans prepared by S. B. Elliott, Stamford, for business building; 82½ feet frontage; first floor to contain three stores; second floor to have 50 sleeping-rooms.

Tex., Wichita Falls.—Wichita County Commissioners are having plans prepared by Jones & Orlopp, superintending architects, 19 Kemp & Lasker Bldg., Wichita Falls, for jail recently noted; will use three old felony cells with corridors; total cell capacity for 50; separation of whites and blacks, juvenile and insane; hospital room, rooms for sheriff; cost \$20,000. Address architects.

Va., Toms Creek (not a postoffice).—Commissary.—Virginia Iron, Coal & Coke Co., Roanoke, Va., will receive bids May 9 for erection of proposed commissary; 150x65x14 feet; mill construction; tile roofing; reinforced concrete floor; electric lighting; freight elevator; will install ice and cold-storage plant, showcases, shelving, etc.; cost \$25,000; plans by Huggins & Bates, Roanoke, Va.; W. B. Bates, consulting engineer, Roanoke. Address proposals to W. M. Morgan, 413 Strickland Bldg., Roanoke.

W. Va., Montgomery.—George Love will erect business building; three stories; brick.

### MUNICIPAL BUILDINGS

Fla., Pensacola.—Market.—City will vote in June on issuance of \$50,000 of bonds for establishment of central market; L. Earle Thornton, City Engineer.

Ga., Atlanta.—Fire Station.—City will open bids May 7 for erection of fire station recently noted; 45x35 feet; two stories and basement; ordinary construction; cost \$12,000; plans by Morgan & Dillon, Grant Bldg., Atlanta.

Ga., Atlanta.—Fire Stations.—Bids will be received by Board of Fire Masters until May 7 for erection of fire station No. 12 and fire station No. 7; contractors are requested to bid for one building and for both; plans and specifications may be seen in office of Morgan & Dillon, architects, Grant Bldg., Atlanta; certified check for \$300, payable to J. C. Harrison, chairman, to accompany each bid.

Ga., Douglas City.—City Hall and Fire Station.—City will erect city hall and fire station combined; two stories; pressed brick; 40x75 feet; first floor for fire station and second floor for city hall. Address The Mayor.

La., New Orleans.—Engine-houses.—W. J. Hardee, City Engineer, prepared plans for two engine-houses to be built in Twelfth ward.

La., New Orleans.—Engine-house and Insane Asylum.—P. A. Noullet & Son of New Orleans are lowest bidders at \$7281 for erection of two-story frame engine-house at St. Mary, St. Charles, Carondelet and Felicite Sts.; Michael Chesni & Co. of New Orleans are lowest bidders at \$39,550 for erection of two-story insane asylum building on Home of Detention grounds.

Tenn., Memphis.—Engine-houses and Police Station.—City purchased sites on which to erect two fire-engine houses and police station. Address The Mayor.

Tex., Bowie.—City Hall and Fire Station.—City will erect city hall and fire station; two stories; 36x140 feet; cost \$15,000. Address The Mayor.

Va., Alexandria.—Jail.—City is considering remodeling of jail or erection of building; B. F. Smith Fireproof Construction Co., 818 14th St. N. W., Washington, D. C., submitted plan for remodeling.

Va., Richmond.—Exhibition Hall.—Council Committee on Finance recommended to City Council appropriation of \$45,000 for erection of exhibition hall on property of Virginia State Fair Association; Charles E. Bolling, City Engineer.

Va., Norfolk.—Police Station.—City Council will consider ordinance for erection of police headquarters; estimated cost, \$35,000; John

Kewan Peebles of Norfolk is drawing preliminary plan; W. R. Johnson, chairman Public Improvement Committee.

Va., Norfolk—Fire and Police Station.—Board of Control will receive bids until May 11 for erection of fire and police station in Berkley ward according to plans and specifications by Lee & Diehl, 408 Seaboard Bank Bldg., Norfolk; plans can be secured at office of architects upon deposit of \$25; certified check for 5 per cent. of bid to accompany each proposal.

### RAILWAY STATIONS

Ark., Arkadelphia.—St. Louis, Iron Mountain & Southern Railway, M. L. Byers, chief engineer, St. Louis, Mo., invites bids on erection of depot; plans call for three buildings, all of pressed brick; main building to have tiled roof and floors, water, sewer and electric-light connections; other two buildings are for freight and express rooms; 100-foot brick platform; cost \$35,000. (Recently mentioned.)

Okl., South Coffeyville.—Missouri Pacific Railway, M. L. Byers, chief engineer, St. Louis, Mo.; St. Louis, Iron Mountain & Southern Railway, M. L. Byers, chief engineer, St. Louis, Mo., and Missouri, Kansas & Texas Railway, S. B. Fisher, chief engineer, St. Louis, Mo., will erect \$10,000 union depot; grading has begun.

Tex., La Porte.—Houston & Bay Shore Traction Co., J. G. Miller, engineer, Houston, Tex., will erect various freight and passenger depots. (See "Electric-Light and Power Plants.")

### SCHOOLS

Ala., Anniston.—Board of Education, A. L. Tyler, president, will open bids May 15 for erection of school; two stories; 100x36 feet; ordinary construction; brick; mechanical ventilation; cost \$10,000; plans by Chas. W. Carlton, Anniston; will also erect six-room addition to Wilmer Ave. school; cost \$10,000; (\$35,000 bond issue recently noted.)

Ala., Birmingham.—Board of Education will receive bids at secretary's office, high-school building, until May 7 for erection of J. B. Cunningham School at East Birmingham; also for plumbing, wiring and vacuum system; certified check and bond; plans and specifications on file at office of D. O. Whildin, architect, Title Guarantee Bldg., Birmingham.

Ala., Gadsden.—John H. Disque, chairman Board of Education, will receive bids until May 16 for erection of school; two stories and basement; cost \$25,000; certified check for \$500; plans and specifications on file at office of C. B. Smith, architect, Stocks Bldg., Gadsden. (See "Machinery Wanted.")

Ala., Tuscaloosa.—City contemplates issuing \$10,000 bonds to erect school. Address The Mayor.

Ark., Helena.—Helena District School Board contemplates expending \$25,000 to erect high-school building.

Ark., Huntington.—City will vote May 21 on \$15,000 bond issue to erect school; two stories; brick; eight rooms and auditorium to seat 350 people. Address The Mayor.

Ark., London.—Board of School Directors will open bids July 1 for erection of school building recently noted; 80x100 feet; brick; stoves; cost \$8000 to \$10,000.

Ark., Lockesburg.—City will vote May 21 on \$10,000 bond issue to erect brick school. Address The Mayor.

Ark., Prairie Grove.—City voted \$20,000 bond issue to erect school. Address The Mayor.

Ark., Russellville.—School Board will receive bids until May 14 (change of date) for erection of two two-story eight-room schools; certified check for \$200; plans and specifications on file at office of Frank W. Gibb & Co., architects, 225 Gazette Bldg., Little Rock, Ark., or at Burke Brick Co., Fort Smith, Ark., and at office of J. A. Clifton, secretary of board, Russellville.

Fla., Jacksonville.—Afro-American Benefit Association will erect building; two stories; brick; cost \$10,000.

Fla., Key West.—Ruth Hargrove Institute contemplates expending \$27,000 for improvements, including erection of building and remodeling present structure.

Fla., West Palm Beach.—Tax School District No. 5 will vote May 31 on \$6000 bond issue to erect school; J. Daugherty and others, School District Trustees.

Ga., Columbus.—Industrial Institute and College will erect \$75,000 dormitory building and other smaller buildings.

Ga., Springfield.—Effingham Academy has plans by E. J. & M. K. Dunne, Sumter, S. C., for \$10,000 building; 69x69 feet; mission style; covered with Ludowici tiling.

Ky., Hardin.—City voted bonds to erect school; two stories; brick; cost \$5000. Address The Mayor.

Ky., Winchester.—Board of Education will soon award contract for erection of proposed Wades Mill School.

La., Lake Charles.—Immaculate Conception Church, Rev. H. Cramer, rector, will rebuild school, rectory and church recently reported burned; cost \$100,000.

Md., Baltimore.—Agricultural Commission will call for new plans for Waverly school at Carroll and Windmere Aves.; cost not to exceed \$120,000; Edward D. Preston, Inspector of Buildings, City Hall.

Md., West Arlington (not a postoffice).—Baltimore County Commissioners, Towson, Md., are planning to erect \$60,000 school at West Arlington.

Miss., Hazelhurst.—Hazelhurst Public School Board is having plans prepared by R. H. Hunt, James Bldg., Chattanooga, for two brick additions to schools recently noted; 30x70 feet each; steam heat; electric lighting; cost \$10,000; will open bids May 25. Address E. M. Cook, Mayor. (See "Machinery Wanted.")

Mo., St. Louis.—Washington University, Robert S. Brookings, president, plans erecting buildings for \$5,000,000 medical school at Kingshighway Blvd. and Euclid Ave.; including Barnes University, property interests valued at \$2,000,000, and Martha Parsons Hospital.

N. C., Elizabeth City.—Elizabeth City State Normal School planning to erect \$15,000 dormitory.

N. C., Fayetteville.—Donaldson Military School will erect building to replace present school.

N. C., Greensboro.—City voted \$35,000 bond issue for school improvements. Address The Mayor.

N. C., West Durham.—Durham County Commissioners, Durham, N. C., propose erection of \$30,000 school.

Okl., Anadarko.—Rev. F. T. Ricklin will open bids May 25 for rebuilding Indian mission school recently burned; 150x50 feet; fire-proof construction; steam heat; acetylene lighting; cost \$50,000; plans by Oklahoma Construction Co., Anadarko.

Oklahoma.—Congregational church is considering several cities as new location for Kingfisher (Okl.) College; Revs. M. D. Reed, Weatherford, Okla.; J. F. Pereshing, Vinita, Okla., and J. Heasty, Medford, Okla., committee.

S. C., Charleston.—Board of Public School Commissioners, James Simons, chairman, Memminger School Bldg., Charleston, will expend \$25,000 to remodel Bennett school, recently noted; 65x112 feet; three stories and basement; to be H-shaped; to contain 14 classrooms, teachers' room, principal's office and library, drinking fountains and assembly room on first floor; plans by Todd & Benson, Charleston.

Tenn., Eastland.—Davidson county is planning to erect \$3000 addition to school; W. C. Anderson, County Superintendent, Nashville.

Tenn., Lonsdale, R. Station, Knoxville.—Lonsdale School Committee, M. A. Copenhaver, chairman, has plans by Baumann Bros., Knoxville, Tenn., for school building recently noted; 89x64 feet; two stories and basement; ordinary construction; brick; steam heat; bids opened May 2.

Tex., Alexander.—City voted \$8000 bond issue to erect school. Address The Mayor.

Tex., Brady.—Brady Independent school district will erect eight-room school building recently noted; two stories; cost \$7000; architect not selected. J. D. Hudson may be addressed.

Tex., Kerrville.—School Board is receiving competitive plans for proposed school.

Tex., Laredo.—City will probably issue \$11,000 of bonds to erect school. Address The Mayor.

Tex., Milford.—Milford Independent School District, W. J. Hamlett, president of board, will expend \$17,500 to erect school building recently noted; two stories and basement; 70x90 feet; 11 rooms; semi-fireproof construction; hot-air heat; acetylene gas lighting; plans by J. O. Gaireath, Hillsboro, Tex.; bids opened April 30. (See "Machinery Wanted.")

Tex., Hondo.—Bids will be received until May 14 for erection of two-story brick addition to school; certified check for \$250; plans and specifications on file at office of F. B. Genslen, architect, 136 West Commerce St., San Antonio, Tex., and of H. E. Haas, president of School Board, Hondo.

Tex., Pendleton.—City voted \$10,000 bond issue to erect four-room brick school. Address The Mayor.

Tex., Port Lavaca.—School Board, J. D. Crain, secretary, will erect brick school; cost \$21,000.

Tex., Pearsall.—School trustees have plans by Henry T. Phelps, San Antonio, Tex., for proposed school; 64x115 feet; brick and stone; three stories; 10 classrooms; auditorium to seat 600; steam or hot-air heat.

Tex., Ringold.—City will erect brick school building; cost \$8000 to \$9000; plans not complete. Address The Mayor. (\$12,000 bonds recently voted.)

Va., Dayton.—Shenandoah Collegiate Institute will erect \$10,000 dormitory and gymnasium building.

Va., Mineral.—Mineral Educational League, Boyd Smith, president, will receive bids until May 14 for erection of proposed high-school building; 60x60 feet; ordinary construction; brick and concrete; furnaces; cost \$8000; plans by C. M. Robinson, 10th and Main Sts., Richmond, Va.; plans and specifications on file with L. A. Keller, clerk of board; right to reject any and all bids reserved.

Va., Newport News.—Virginia State School for Colored Deaf and Blind Children, Wm. C. Ritter, superintendent, will open bids June 1 for erection of boiler-house, laundry and shops; 96x50 feet; brick; steam heat; electric lighting; cost \$7000; plans by C. T. Holtzclaw, Hampton, Va.; will also erect superintendent's and teachers' residence, to cost \$2500 to \$3000; cost of improvements, including equipment, \$18,000. (See "Machinery Wanted.")

Va., Portsmouth.—City will issue \$50,000 of bonds for school improvements. Address The Mayor.

W. Va., Beckley.—City will vote May 17 on bond issue to erect high-school building; 12 rooms; brick. Address The Mayor.

W. Va., Charleston.—Board of Education, W. O. Daum, secretary, will receive bids until May 10 for erection of four-room addition to Lincoln School; plans and specifications on file at office of superintendent, High School Bldg.; certified check for \$500.

W. Va., Keyser.—Board of Education will open bids June 10 for erection of school building; 80x70 feet; ordinary construction; hot-air heat; cost \$7,000. Address Jas. W. Stayman. (Recently mentioned.)

W. Va., Parkersburg.—Board of Education will open bids May 13 for erection of school-house recently noted; one story; ordinary brick construction; cost \$3000; plans by D. W. Daley, Parkersburg. Address proposals to Geo. D. Heaton.

### THEATERS

D. C., Washington.—H. H. Elliott, 1520 14th St. N. W., is having plans prepared by Miller & Miller, Evans Bldg., Washington, for moving-picture theater, 40x100 feet, at 14th and Church Sts.

Ga., La Fayette.—R. M. W. Glenn and C. M. Warthen have plans for opera-house; seating capacity, 700 to 1000.

Md., Baltimore.—W. I. Wolfe is having plans prepared by Henry J. Tinley, 324 North Charles St., Baltimore, for amusement building at Stratford Ave. and Longwood Rd.; 40x60 feet, and addition 25x30 feet; frame; cost \$1500; construction by owner; one story.

Md., Baltimore.—Daniel H. Braun, 878 Columbia Ave., purchased site 27x101 feet on Columbia Ave. on which to erect moving-picture theater.

Md., Oakland.—Knights of Pythias will erect 45x110-foot building; to contain theater, offices and lodge hall. (See "Association and Fraternal Buildings.")

Tex., Belton.—A. H. Glasscock, Ballinger, Tex., is considering, it is reported, remodeling building on Main St. as opera-house.

### WAREHOUSES

Fla., Jacksonville.—Wilson & Toomer Co. will erect 60-foot extension to warehouse (See "Fertilizer Factories.")

Ga., Macon.—J. F. Heard is interested in erection of cotton warehouse.

Md., Baltimore.—Frederick Bonhage & Co., 603 Water St., purchased site 49x67 feet on Water St., on which to erect warehouse.

Md., Leonardtown.—Matthews-Howard Implement Co. will erect warehouse; 30x60 feet; two stories; cement-block foundation; frame; tin roof; stoves; cost \$2500; plans by R. S. Garner, La Plata, Md.; bids opened May 15.

Tex., San Angelo.—National Biscuit Co., New York, J. E. Walls, local manager, will not erect warehouse; recent report incorrect.

Va., Petersburg.—Straus, Gunst & Co. are having plans prepared for four-story warehouse; depth about 60 feet.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

Md., Baltimore.—Ella E. Ditch awarded contract to W. T. Childs, 16 West 20th St., Baltimore, for addition to residence at 2323 North Charles St. and remodeling as apartment-house; three stories; 25x25 feet; brick; steam heat; cost \$5000.

Md., Baltimore.—The Falconer Company, 5-7 North Gay St., has invited following contractors to bid on erection of proposed warehouse at Gay and Water Sts.: C. L. Stockhausen, National Marine Bank Bldg.; John Hiltz & Sons Company, 3 Clay St.; Edward Brady & Sons, 1109-1113 Cathedral St.; Engineering-Contracting Co., 502 St. Paul St.; J. Henry Miller, 110 Dover St.; J. O. Hederman, 1601 East Lafayette Ave.; Baltimore Ferro-Concrete Co., 16 St. Paul St., all of Baltimore; plans prepared by Parker, Thomas & Rice, 1109 Union Trust Bldg., Baltimore, call for four-story concrete structure, 70x125 feet.

S. C., Greenwood.—J. J. Keller & Co., Rock Hill, S. C., have contract to erect \$12,000 apartment-house.

Tenn., Chattanooga.—Crown Laundry awarded contract to T. A. Chambers, 813 Henderson Ave., Chattanooga, for erection of building to contain apartments and laundry. (See "Miscellaneous Enterprises.")

Va., Portsmouth.—V. G. Weaver and W. H. Baker awarded contract at \$5533 to L. M. Davis, Norfolk, Va., to erect brick apartment-house. (Recently mentioned.)

### ASSOCIATION AND FRATERNAL BUILDINGS

Ala., Birmingham.—Fraternal Hall Association awarded contract to Carrigan & Lynn, Birmingham, for erection of fraternal hall building; 140x100 feet; four stories; cost \$60,000; plans by H. B. Wheelock, Steiner Bank Bldg., Birmingham. (Recently mentioned.)

Tenn., Nashville.—Young Men's Christian Association awarded contracts for association building as follows: To George Moore & Sons, for carpenter work; Foster Herbert Cut Stone Co., cut stone; T. J. Mooney & Co., heating and plumbing; Foy-Proctor Company, concrete construction and cement paving; J. K. Bernal, painting; Fulcher Brick Co., brick work, all of Nashville; will soon award contract for steel work; building will be seven stories; 140x140 feet; cost \$200,000; plans by W. F. Shattuck, 218 La Salle St., Chicago, Ill. (Recently mentioned.)

### BANK AND OFFICE BUILDINGS

Ala., Gadsden.—Southeastern Engineering Co., Chamber of Commerce, Birmingham, Ala., recently noted to receive contract for erection of Etowah County Bank & Savings Co.'s building, is also designer of plans for structure; brick and reinforced concrete; four stories; steam heat; electric lighting; electric elevator; tile floor in banking rooms; offices on second and third floors; lodgerooms above; J. Wadsworth is president of the bank company.

Fla., West Palm Beach.—G. G. Strohm will expend \$3500 to erect office building; two stories; 20x60 feet; cement blocks; electric lighting; plans by W. W. Maucklin, West Palm Beach; contract recently noted awarded to Grant & Botts, West Palm Beach.

Ga., Atlanta.—A. D. Adair and McCarty Bros. awarded contract to Mose De Leon, Fourth National Bank Bldg., Atlanta, to erect office and store building; eight stories; 50x100 feet; tapestry brick; stone and terracotta trimmings; reinforced concrete construction; steam or vapor heat; electric lighting; electric elevators; cost \$85,000; plans by P. Thornton Marye, Candler Bldg., Atlanta; proposals on mechanical equipment to be addressed to architect; address contractor on other bids. (Recently mentioned.)

Md., Baltimore.—Emerson Drug Co., 308-312 West Lombard St., is proceeding with arrangements for erection of proposed tower building at Lombard and Eutaw Sts.; eight stories; surmounted by 200-foot tower; 355 feet high; plans by Joseph Evans Sperry, Calvert Bldg.; William H. Parker, Clay St., between Charles and Liberty Sts., in charge of construction; both of Baltimore.

Miss., Tutwiler.—H. B. Fitch awarded contract to H. B. Beall, Como, Miss., for erection of office and store building. (See "Miscellaneous Structures.")

Tenn., Nashville.—First Savings Bank & Trust Co., Cole Bldg., 4th Ave. and Union St., awarded contract to E. & N. Manufacturing Co. of Nashville to remodel banking-



room; improvements to include marble wainscoting and bronze railing; cost \$20,000.

### CHURCHES

S. C., Tabernacle.—Methodist Church awarded contract to W. B. Cauthen of Lancaster, S. C., to erect edifice; will require about 20,000 feet of lumber.

Tex., Hutto.—Swedish Methodist Church awarded contract to Fred Lundree, Taylor, Tex., for erection of edifice recently noted; 50x46 feet; mill construction; acetylene lighting; cost \$4000; plans by O. Anderson, 601 East 15th St., Austin, Tex.

Va., Danville.—Congregation "Aetz Chayim" awarded contract to W. A. Gravelly of Danville to erect synagogue; plans by Jos. A. Parker of Danville.

### COURTHOUSES

Okla., Altus.—Jackson County Commissioners awarded contract to Rawles & Bailey, Oklahoma City, Okla., to erect courthouse.

### DWELLINGS

D. C., Washington.—Henry White awarded contract to Nixon Bros. for erection of dwelling at 1625 Belmont St.; three stories; brick and stone; cost \$80,000; plans by John Russell Pope, 527 Fifth Ave., New York.

D. C., Washington.—John P. Sheehan, 701 North Capitol St., awarded contract to R. T. Humphreys, 912 H St. N. E., Washington, for residence on Park Rd.; cost \$14,000; plans by Harding & Upman, 729 15th St. N. W., Washington.

D. C., Washington.—Mrs. Marlon Green awarded contract to Payne & Dyer for erection of two dwellings at 4638-40 Conduit Rd. N. W.; two stories; frame; cost \$3500; plans by C. E. Webb, Warder Bldg., Washington.

Fla., St. Petersburg.—F. B. Trotti awarded contract to George N. Savern, St. Petersburg, for erection of 10-room residence.

Md., Baltimore.—W. T. Ditch awarded contract to W. T. Childs, 16 East 20th St., Baltimore, for erection of addition to dwelling; 25x25 feet; three stories and basement; ordinary construction; steam heat; electric lighting; cost \$5000; plans by John K. Stack, 12 East Lexington St., Baltimore.

Md., Baltimore.—Armstrong Thomas, 904 Maryland Trust Bldg., awarded contract to L. J. Brown, Pimlico Blvd. near Belvidere Ave., Baltimore, for erection of three dwellings on 25th St.; 14x50 feet; slag roofs; two stories; brick; cost \$5000; plans by John R. Forsythe, 232 St. Paul St., Baltimore.

Md., Baltimore.—J. Nicholson awarded contract to J. O. Cundiff, North Ave., near Kelley Ave., Mt. Washington, Md., for erection of residence at Colonial Park estate; two stories and attic; plans by C. M. Anderson, 324 North Charles St., Baltimore; building to be 30x30 feet; mill construction; steam heat; electric lighting; cost \$4000. (See "Machinery Wanted.")

Md., Baltimore.—Starr M. P. Church, Poppleton and Lemmon Sts., awarded contract to Fidelity Construction Co., North and Lexington Sts., Baltimore, for erection of parsonage on Garrison Ave., near Piedmont Ave.; two and a half stories; frame; cost \$10,000.

Md., Baltimore.—John Manuel and James H. Smith have plans by and awarded contract to W. H. Wingate, 60 Holmstead Ave., Baltimore, for erection of dwellings; 75x48 feet; brick with fire walls; furnaces and stoves; gas lighting; cost \$3000.

Md., Loreley.—C. A. Hyde, Boston, Mass., awarded contract for John Sheridan, 996 North Carrollton Ave., Baltimore, for improvements to residence.

Md., Reisterstown.—Jewish Home for Consumptives, Louis H. Levin, secretary, 411 West Fayette St., Baltimore, Md., awarded contract to G. W. Tovell, Reisterstown, for erection of proposed cottage; cost \$10,000; plans by C. M. Anderson, 314 North Charles St., Baltimore, Md.; construction under supervision of H. Friedenwald, 1029 Madison Ave., Baltimore.

Md., Chevy Chase.—Dangersfield Parker, The Westmoreland, Washington, D. C., awarded contract to John Simpson's Sons for erection of residence; cost \$10,000.

Md., Mt. Washington.—J. Nicholson awarded contract to J. O. Cundiff for erection of residence; cost \$4500; plans by C. M. Anderson, 324 North Charles St., Baltimore, Md.

Mo., St. Louis.—Edward A. Faust awarded contract to Rotterman Building & Contracting Co., St. Louis, for erection of residence; 20 rooms; frontage, 82 feet; stone and brick; cost \$100,000; plans by and construction under supervision of Barnett, Haynes & Barnett, St. Louis.

N. C., Gastonia.—D. W. Padgett awarded contract to Oakley & Clemmer, Gastonia, for erection of eight-room residence; ordinary construction; electric lighting; cost \$2000; plans by O. Craig, Gastonia; no material needed.

N. C., Gastonia.—R. B. Babington awarded contract to Oakley & Clemmer, Gastonia, for erection of residence; 12 rooms; brick; cost \$5000; plans by O. Craig, Gastonia.

N. C., Mt. Holly.—J. A. Costner will erect residence; 32x42 feet; two stories; ordinary construction; hot-water heat; electric lighting; cost \$35,000; plans by Hook & Rogers, Charlotte, N. C.; contract awarded to R. F. Rankin, Mt. Holly.

S. C., Lancaster.—W. J. Hammond awarded contract to W. B. Cauthen, Lancaster, for erection of residence.

Tenn., Memphis.—J. K. Mitchell awarded contract to D. C. Armstrong, Memphis, for erection of residence; two stories; stone veneer; cost \$6000; servants' house in rear; two stories; frame; cost \$700.

Tenn., Memphis.—W. L. Bryant awarded contract to D. C. Armstrong, Memphis, for erection of residence; two stories; eight rooms; stone veneer; cost \$6000; heating plant to cost \$300; also one-story frame servants' house; cost \$350.

Tenn., Memphis.—George Reid awarded contract to W. R. Gilbert, Memphis, for erection of residence; 12 rooms; two stories; stone veneer; cost \$7000; heating plant, \$450.

Tex., Palestine.—A. E. Jackson awarded contract to J. B. Rountree, Palestine, for erection of nine-room two-story dwelling; ordinary construction; cost \$4000.

Tex., Taylor.—First Presbyterian Church awarded contract to Ernest Grohn, Taylor, for erection of manse; two stories; eight rooms; cost \$2500.

Va., Norfolk.—C. R. Carver awarded contract to William Main, Norfolk, for erection of brick residence; cost \$3000.

Va., Norfolk.—F. H. Dobbs awarded contract to Dear & Totty, Norfolk, for erection of brick residence; cost \$6500.

Va., Norfolk.—A. R. Snyder awarded contract to Callis & Thomas, Norfolk, for erection of residence; brick and frame; cost \$7000.

W. Va., Oak Hill.—E. T. Jones, Charleston, W. Va., awarded contract to W. J. Connell, Huntington, W. Va., for erection of residence; cost \$75,000; cost of heating, \$6000; wiring, \$2000.

### HOTELS

Fla., Seabreeze.—M. L. Wagoner, T. F. Williams, C. M. Carrier and others will erect hotel; coquina rock; fireproof; contain 150 rooms; S. H. Gove of Seabreeze has prepared plans and been awarded contract for erection; E. W. Langworthy, manager of Ridgwood Hotel, Daytona, Fla., will be in charge.

Okla., Oklahoma City.—H. C. Finley, Post-office Bldg., awarded contract to R. M. Crissman, P. O. Box 393, Oklahoma City, for erection of hotel and store recently noted; 45x170 feet; brick; hot-water heat; cost \$25,000; plans by Wheeler & Walker, Oklahoma City. (See "Machinery Wanted.")

Tenn., Clarksville.—Green & Love awarded contract to W. F. Coulter Mill & Lumber Co., Clarksville, for remodeling hotel recently noted; improvements to include baths, tile floor, steel ceiling in lobby and offices, improvement of plumbing system, etc.; cost \$7000 to \$10,000.

### MISCELLANEOUS STRUCTURES

Ala., Birmingham.—Store.—James Toole, Montgomery, Ala., awarded contract to H. A. Stockmar, Birmingham, for erection of proposed store and office building; 34x84 feet; white enameled brick; white marble trimmings; plate and prism glass; cement floors; low-pressure steam heat; electric lighting; cost \$30,000; plans by P. J. La Belle, 338 Hood Bldg., Birmingham.

Ala., Birmingham.—Hospital.—Dr. E. M. Robinson awarded contract to Theo. Pauli, 500 South 19th St., Birmingham, for erection of hospital; ordinary construction; hot-air heat; gas and electric lighting; cost \$20,000; plans by J. W. McClain, Birmingham. (Recently noted under "Dwellings.")

Ala., Montgomery.—Stables.—Grell Bros. Company awarded contract to Graves & Estes, Montgomery, for erection of proposed stables; 80x100 feet; ordinary construction; cost \$6500; plans by Okel & Cooper, Montgomery.

Ark., Star City.—Jail.—Lincoln County Commissioners awarded contract to \$10,000 to Pauly Jail Building Co., St. Louis, Mo., for erection of jail.

Fla., Kissimmee.—Business.—W. C. Bass awarded contract for rebuilding business

building recently burned; one story; 30x40 feet.

Ga., Atlanta.—Business.—J. T. Pendleton awarded contract to Griffin Contracting Co., Atlanta, for erection of business building for Rhodes Millinery Co.; five stories and basement; 54x125 feet; reinforced concrete and mill construction; steam heat; electric lights; passenger and freight elevators; automatic sprinkler; cost \$45,000; plans by Walker & Chase, Atlanta.

Ga., Calhoun.—Jail.—Gordon County Commissioners awarded contract to Bellonby & Wolcott, Griffin, Ga., for erection of jail; 39.10x50.5x26.6 feet; concrete and stone; electric lights; cost \$15,000; plans by Pauley Jail Building Co., St. Louis, Mo. (Previously mentioned.)

Ga., Vidalia.—Store.—W. G. Thompson awarded contract to Funnell & Chester, Vidalia, for erection of store building recently noted; 20x30 feet; fireproof construction; cost \$2500; plans by E. P. Crutchfield, Vidalia.

La., New Orleans.—Store.—La Browne Realty Co. awarded contract for erection of store building; two stories; ordinary construction; cost \$15,000; plans by Toledano & Wogan, New Orleans.

La., New Orleans.—Business.—G. A. Westfeldt and others awarded contract to Jefferson Construction Co., St. Louis, for erection of business building; three stories; brick.

La., New Orleans.—Store.—Geo. A. Bonnet awarded contract to F. J. Rolland, New Orleans, for erection of store building recently noted; 27x63 feet; ordinary construction; gas and electric lighting; cost \$2450; plans by Chas. Valadie, 924 Bourbon St., New Orleans.

Md., Baltimore.—Store.—George E. Buchholz, 321 West Monument St., awarded contract to J. J. Moylan, 117 East Centre St., Baltimore, for erection of store at 647 North Eutaw St.; three stories; brick; 17x93 feet; cost \$6000; plans by H. J. Tinley, 314 North Charles St., Baltimore.

Md., Baltimore.—Clubhouse.—Baltimore Athletic Club, 1420-1424 North Charles St., awarded contract to Engineering Contracting Co., 207 American Bldg., Baltimore, for erection of two additional stories; elevators, fireproof stairways, etc.; cost \$30,000; plans by Clyde N. Friz, 11 East Pleasant St., and E. H. Glidden, Glenn Bldg., both of Baltimore. (Recently mentioned.)

Md., Lauraville.—Fire Station.—Lauraville Volunteer Fire Co. awarded contract to Leonard Dittman & Bro. for erection of engine-house recently noted; 39x46 feet; brick; cost \$3500; plans by Charles Sack, Lauraville.

Miss., Newton.—Mercantile.—Eagle & Wise awarded contract to A. L. Myers, Newton, for erection of mercantile building; 50x100 feet; two stories and basement; brick; probably acetylene lighting; cost \$7500; plans by Burt Stuart, Meridian, Miss. (See "Machinery Wanted.")

Miss., Tutwiler.—Store and Offices.—H. B. Fitch awarded contract to T. W. Beall Company, Como, Miss., for erection of proposed store and office building; 50x80 feet; two stories and basement; two stores on ground floor; offices and auditorium above; basement to contain barber shop and poolroom; plans by M. M. Alsop, Ittabena, Miss.

Mo., Jackson.—Jail.—Cape Girardeau county awarded contract to Wallace Bros., Jackson, Mo., and to Pauly Jail Building Co., St. Louis, Mo., for erection of jail and jailer's dwelling; 41.10x54 feet; fireproof construction; steam heat; electric lighting; cost of dwelling; 41.10x54 feet; fireproof construction; Pauly Jail Building Co., St. Louis, Mo. (Recently noted at Cape Girardeau.)

S. C., Rock Hill.—Auditorium.—Barber estate awarded contract to \$13,000 to J. J. Keller & Co., Rock Hill, for erection of store and auditorium building; two stories.

S. C., Lexington.—Business.—Alfred J. Fox awarded contract to John W. Fry, Lexington, for erection of building; 30x30 feet; ordinary construction; brick; acetylene-gas lighting; cost \$3000; plans by owner. (Recently incorrectly noted under "Lexington, N. C.")

Okla., Tulsa.—Business.—Mayo Furniture Co. awarded contract to Shallenberger Construction Co. for erection of building; four stories and basement; reinforced concrete; 50x140 feet; cost \$45,000.

Tenn., Memphis.—Store.—Mrs. Williams awarded contract to R. F. Creson, Memphis, for erection of store; two stories; brick; six rooms; cost \$4000.

Tex., Cameron.—Store.—D. Monroe awarded contract to Joe Westmoreland, Cameron, for erection of store building recently noted; 30x15 feet; brick; cement floor; steel ceiling; cost \$4500.

Tex., Lockhart.—Business.—Masur Bros. & Storey have plans by and awarded contract to L. H. Neeb, Lockhart, for erection of business building recently noted; 75x78 feet; brick and glass; electric lighting; cost \$20,000.

Tex., Palestine.—Hardware Building.—John H. Stillman awarded contract to J. B. Rountree, Palestine, for erection of two-story brick business building recently mentioned; cost complete, \$18,000; electric and gas lighting; freight elevator; plans by James F. Brooks, Palestine.

Tex., Westhoff.—Business.—A. T. Teller awarded contract for erection of brick business building.

Va., Norfolk.—James V. Trehy awarded contract to T. D. Murden, Norfolk, for erection of store; brick; cost \$3500.

Va., Danville.—Store and Office.—L. Herman awarded contract to J. T. Wilson & Co., Richmond, Va., for erection of five-story store and office building.

Va., Roanoke.—Store.—C. E. Steakman awarded contract to R. A. Figgatt, Roanoke, for erection of proposed store building; plate-glass front; metal roof; cost \$5000.

### SCHOOLS

D. C., Washington.—Army and Navy Preparatory School, 4101 Connecticut Ave. N. W., awarded contract for erection of additional building at 2973-75 Upton St.; two stories and basement; will also remodel present structure for dormitory; purchased and will remodel building at 4107-09 Connecticut Ave. and erect kitchen in rear. (Noted in March.)

Fla., Jacksonville.—Boylan College awarded contract to W. S. Kadz, Jacksonville, for erection of building; three stories, basement and attic; Jacksonville burned brick; 117x61 feet; two sections, divided by large court on first floor and connected on two upper floors by piazzas; gas and electric lights; cost \$25,000; plans by W. B. Camp, Jacksonville.

Ga., Waycross.—Colored Industrial College, G. P. Washington, chairman building committee, awarded contract to W. L. Davis, Tuskegee, Ala., for erection of college building recently noted; 10 rooms; veneered white brick; cost \$5000.

Md., Roland Park, Station L., Baltimore.—Country School for Boys, Charles-Street Ave. Ext., awarded contract to Edward Brady & Son, 1109-13 Cathedral St., Baltimore, for erection of administration and dormitory building at Belvidere and Roland Aves.; 40x200 feet; steam heat; cost \$135,000; plans by Parker, Thomas & Rice, 1109-11 Calvert Bldg., Baltimore. (Previously mentioned.)

Miss., Lambert.—City awarded contract for erection of school building recently noted; 55.6x72.6 feet; ordinary construction; hot-water heat; cost \$5000; plans by M. M. Alsop, Ittabena, Miss.

Okla., Blackwell.—Oklahoma State Baptist College, J. H. Moore, president, awarded contract for erection of girls' dormitory and gymnasium buildings; cost \$50,000. (Recently mentioned.)

Okla., Cleveland.—Board of Education awarded contract at \$15,500 to Foley & Ellis, Cleveland, for erection of high-school building in Mitscher Heights addition; stone and brick; plans by L. H. Babcock, Bartlesville, Okla.

Okla., Oklahoma City.—City awarded contract at \$6957 and \$10,325, respectively, to George W. Fletcher, Oklahoma City, for erection of additions to McKibbey and Jefferson schools, and at \$13,912 to J. W. Lucas, Oklahoma City, for erection of addition to Riverside school; also awarded contract for extension of heating plants at McKinley and Jefferson schools at \$3150 and \$4240 to Lewis & Kitchen, Oklahoma City.

Okla., Woodward.—City awarded contract for erection of \$12,000 school. Address The Mayor.

Tenn., Knoxville.—Knoxville County Industrial School awarded contract to Hall Lumber Co., Knoxville, for erection of dormitory to replace burned structure; contracts for heating, wiring and plumbing not awarded; cost \$8000; plans by L. C. Waters, Knoxville. (Previously mentioned.)

Va., Cherrydale.—City awarded contract to A. J. Simpson, Round Hill, Va., for erection of proposed school; Spanish style; brick and concrete; four rooms; plans by C. M. Robinson, 10th and Main Sts., Richmond, Va.

Va., Danville.—Roanoke College awarded contract to Howard Moss, Newport News, Va., for erection of proposed college building.

Va., Norfolk.—Norfolk County Commissioners awarded contract to Charles F. Harper for erection of proposed school at Prentiss Park.

Va., South Norfolk.—Norfolk county awarded contract at \$16,800 to Charles F. Harper

for erection of school; at \$1475 to W. G. McGinley for plumbing, and at \$1835 to American Heating & Ventilating Co., Richmond, Va., for heating. (Recently mentioned.)

### THEATERS

La., Lake Charles.—J. L. White awarded contract to Delatte & Lagrange, Lake Charles, for brick work for proposed theater; 70x126 feet; fireproof construction; hot-water heat; electric lighting; cost \$25,000; plans by J. C. Carter, Lake Charles.

Md., Baltimore.—Paradise Amusement Co., Eugene Cook, president, 2841 North Calvert St., awarded contract to John K. McQuer of Baltimore to erect moving-picture and vaudeville theater on North Ave. near Charles St.; two stories; 40x96 feet; brick; cost \$16,000; plans by Francis E. Torney, 404 Wilson Bldg., Baltimore. (Mentioned in February.)

### WAREHOUSES

Ky., Springfield.—Springfield Loose-leaf Tobacco Warehouse Co., recently reported incorporated with \$12,000 capital stock, has plans by and awarded contract to Frank Yankey, Springfield, for erection of warehouse; 108x204 feet; wood; metal; brick; glass; cost \$11,000.

Md., Baltimore.—Jacob Siehler, 465 West Barre St., awarded contract to Henry L. Maas, 1110-1121 Ensor St., Baltimore, to erect proposed warehouse at 405-411 West Barre St.; three stories; 70x36 feet; brick; cost \$5000; plans by Edward L. Storch.

W. Va., Charleston.—Armour & Co., Chicago, Ill., awarded contract to David Dick of Charleston to erect warehouse and store-room; reinforced concrete; three stories.

## RAILROAD CONSTRUCTION

### RAILWAYS

Ala., Gadsden.—The Nockola Railway, Light & Power Co., promoted by Harry A. Rodgers, Lou Hart and others, has been granted a franchise in Gadsden for its line, which will run to Lookout Mountain, Alabama City and Attalla.

Ala., Mobile.—An officer of the New Orleans, Mobile & Chicago Railroad denies the report that the company proposes to build terminals in New Orleans or that it has applied for franchise to enter that city. It has, however, applied to the city of Mobile for extension there, but decision has not yet been given. W. F. Owen is vice-president and general manager at Mobile, Ala.

Ark., Hamburg.—J. M. Parker, general manager of the Arkansas, Louisiana & Gulf Railway, is reported as saying that construction will be started within two months on the extension from Hamburg to Mena, Ark., via Pine Bluff; T. G. Cooke is engineer at Hamburg, Ark.

Ark., Little Rock.—The St. Louis, Iron Mountain & Southern Railway Co., Missouri Pacific system, has let contracts for grading for second track between Bald Knob and McAlmont, Ark., to the Walsh Construction Co. of Davenport, Iowa; for similar work between Diaz and White River Bridge, Ark., and between Poplar Bluff and Harvell, Mo., to Ball & Peters of Little Rock, Ark.; for trestle-work on all of the foregoing to Burke & Joseph of Cape Girardeau, Mo. Contract for second track grading on the Missouri Pacific Railway between Jefferson City, Mo., and Cole Junction was let to T. B. Jones & Co. of Louisville, Ky.

Ark., Pochontas.—An officer of the St. Louis & San Francisco Railroad is reported as saying that a steel drawbridge with channel span 280 feet long will be built over the Black River at Pochontas; estimated cost, \$100,000. The company's forces will do the work, which will begin before August. F. S. Rice is engineer of bridges at St. Louis, Mo.

Fla., Jacksonville.—The St. Johns River Terminal Co. will build at Jacksonville yard tracks at shops, several industrial tracks, and will reconstruct the river-front track. J. B. Munson is president at Macon, Ga.

Fla., Pensacola.—The Louisville & Nashville Railroad, says a dispatch, contemplates erecting a union passenger station in Pensacola to cost about \$200,000, and options on property are being obtained. W. H. Courtney is chief engineer at Louisville, Ky.

Fla., Pensacola.—The proposition to build a railroad from Pensacola to Andalusia, Ala., projected last year by Richard Tills of Montgomery, Ala., and others has been revived, and it is reported that Messrs. Foshee and McGowan of Brewton and Foshee are interested; also that William Fisher and James Muldon of Pensacola have become directors in the company. Under an ordinance passed by the City Council work

upon the terminal in Pensacola must begin within a month.

Ga., Augusta.—Charter has been granted to the Augusta, Lincolnton & Northern Railroad, which, as previously reported, proposes to build line about 100 miles long from Augusta to Danielsville, Ga. The incorporators are Samuel L. Wilkes and J. C. Groves of Lincolnton, John J. Wilkinson, C. D. Bolton and Thomas W. Hill of Wilkes, Thomas L. Verdel, W. A. Swift, T. M. Swift, Jr., and Z. C. Hayes of Elberton, and E. N. Cobb of Athens.

Ga., Rome.—Reported that contracts will probably be let this month for the extension of the Rome & Northern Railroad from Gore northeast to Tunnel Hill, 33 miles. H. M. Smith is chief engineer at Rome, Ga.

Ga., Savannah.—The Brinson Railway Co. is reported to have begun an extension into its new terminal; also that the proposed extension from Milhaven to Waynesboro, Sparta and Athens, Ga., about 110 miles, will soon be started. S. E. Grimshaw is chief engineer, and George M. Brinson, president, at Springfield, Ga.

Ga., Waycross.—The Waycross & Southern Railroad Co., it is reported, is being organized and application will be made for a charter to build a line south and southwest from Waycross; capital \$100,000. Among those interested are James W. Oakford of Scranton, Pa.; Daniel L. Hebard of Piquemine, Mich.; Bryan Cumming of Summerville, Ga.; Chas. S. Hebard of Thomasville, Ga.; F. L. Space of Forty Fort, Pa.; Walter Briggs of Scranton, Pa.; R. B. Hopkins of Brunswick, Ga.; Stanley Manness, J. M. Hopkins and B. W. Redding of Waycross, Ga.

Ga., Wrightsville.—The Wrightsville, Adrain & Lyons Railroad Co. has been chartered to build a line 50 miles long, connecting the three points named in the title. The incorporators are R. M. Garbutt and W. O. Donovan of Toombs county; E. J. Sumner, J. E. Webb, C. B. Salter and R. L. Gillis of Emanuel county. The railroad as projected will include two pile bridges, one of 1000 feet and the other 800 feet long. The company is ready to receive bids for construction. T. J. James of Adrain, Ga., is president and W. F. Staten, also of Adrain, Ga., secretary. A press dispatch says that construction will begin May 9.

Ky., Glasgow.—The Louisville, Lincoln Farm & Mammoth Cave Traction Co., capital \$1,000,000, is reported organized to build its proposed line from Glasgow to Mammoth Cave and to Green River at the head of navigation. New York and Chicago capital is said to be interested. J. M. Richardson is president; J. A. McDaniels, vice-president; J. Wood, secretary and treasurer; J. Lewis Williams, general counsel.

Ky., Louisville.—An officer of the Baltimore & Ohio Southwestern Railway denies the press report that the company would spend \$300,000 to improve terminal facilities at Louisville.

Ky., Webbville.—A correspondent writes that the extension of the Eastern Kentucky Railway from Webbville to timber and coal lands in Breathitt county, 69 miles, is assured. Preliminary survey under way. S. G. Bates is vice-president and general manager at Riverport, Ky. A press report says that C. D. Warren and F. W. Fletcher of Toronto, Canada, are interested, and that Mr. Gibson of Jackson, Ky., is chief engineer.

La., Myrtistown.—The Southern Lumber Co. says it is building a logging road from Myrtis into timber land; it denies the report that it is building a line to Jefferson, Tex.

Md., Baltimore.—An officer of the Baltimore & Ohio Railroad says that the company is not now doing anything toward building a new station on Camden St. This refers to the long-contemplated erection of a new passenger depot and the conversion of Camden Station into a freight terminal.

Md., Brandywine.—The Manufacturers' Record is informed that the Washington, Potomac & Chesapeake Railroad is obtaining rights of way for an extension of five miles from Mechanicsville, Md. W. W. Early is general manager at Brandywine, Md., and Henry W. Watson is president, Franklin Bank Bldg., Philadelphia, Pa.

Md., Elkton.—One of the incorporators of the Elkton, Fair Hill & Oxford Electric Railway & Power Co. says that a charter is yet to be obtained from the Pennsylvania Legislature to supplement the charter recently obtained in Maryland. The line will run from Elkton via Cherry Hill and Fair Hill, Md., and Lewisville, Pa., to Oxford, Pa., through a thickly settled farming country. The incorporators are John Langren of Lewisville, Pa.; Dr. C. P. Carrice of Cherry Hill, Md.; George E. L. Hess and H. Eugene Mackie of Fair Hill, Md., and Hester Hess of Elkton, Md.

Md., Frederick.—The Frederick Railroad Co. has authorized a bond issue to provide for the proposed extension from Thurmont to Emmitsburg, Md., and Gettysburg, Pa., about 18 miles. W. S. Taylor is general manager.

Md., Hagerstown.—The Cumberland Valley Railroad, according to a press dispatch, will double-track its line from Hagerstown to the Potomac River, about 12 miles, besides building a steel bridge at Falling Water. G. C. Koons is engineer at Chambersburg, Pa.

Miss., Newton.—The Newton Northwestern Railroad Co. proposes to build 40 miles of line from Newton to Carthage, Miss., via Conehatta, Sebastopol and Walnut Grove, including three bridges, two of 200 feet each and one of 1500 feet. Country is rolling. D. L. Ragland is the contractor, and bids will be invited in about three months. The officers are D. L. Ragland, president and chief engineer; W. A. Brown, general manager and acting vice-president; W. V. Fant, secretary and treasurer, all of Newton, Miss. H. C. Majure, also of Newton, and others are likewise interested.

Miss., Summit.—A dispatch says that citizens of Summit offer a bonus of \$6000 and one mile right of way for the construction of a motor-car line to Godbold Mineral Wells and McComb City, about four miles. The Mayor may be able to give information.

Mo., Kansas City.—W. B. Strang of the Missouri & Kansas Interurban Railway is quoted as saying that options have been obtained on a site for a \$2,000,000 union electric interurban railway terminal between Grand Ave. and McGee St. in Kansas City. Plans for the building have been completed. The company will be known as the Missouri & Kansas Terminal Building Co., and he will be president.

Mo., Kansas City.—The Missouri Terminal Co. is reported being organized by Kansas City people to build a four-track railroad from Martin City, immediately south of the city limits, to the proposed new union station in order to give a shorter terminal route to the Missouri, Kansas & Texas, the Kansas City Southern, the Chicago, Rock Island & Pacific, the St. Louis & San Francisco and the Missouri Pacific railroads. James H. Knapp is the promoter.

Mo., St. Charles.—Reported that a company is organized at Middletown, Mo., to build an electric railway from St. Charles northwest to Troy, Olney, Marling, Middletown, Mt. Carmel, Laddonia, Mexico, Paris and other points. C. B. Duncan of Olney, Mo., is president and R. E. Race of Mexico, Mo., vice-president and manager.

Mo., St. Louis.—J. D. Houseman is reported to have financed construction of the St. Louis County Belt Railroad to run from Jefferson Barracks to Spanish Lake and O'Neil, 27 miles, and is now securing rights of way.

Okla., Okmulgee.—The Okmulgee & Coalton Railroad, according to a letter, is projected by the Okmulgee Chamber of Commerce, the object being to connect with the Missouri, Oklahoma & Gulf Railway. C. S. Dawley and others are interested, but the organization is not perfected. N. D. Boyd is president, T. J. Baker vice-president, John A. Bedford secretary and treasurer.

Okla., Oklahoma City.—An officer of the Frisco system says, regarding the report that new terminals will be built at Oklahoma City, that no work of this character has yet been decided upon.

Okla., Oklahoma City.—W. M. Whittenton, manager of the Rock Island system at El Reno, Okla., is reported as saying that the company will build five miles additional of switching tracks at Oklahoma City. J. B. Berry is chief engineer at Chicago, Ill.

Okla., Oklahoma City.—Concerning the report that the Santa Fe system contemplated the building of a new terminal at Oklahoma City, an officer says it has not been definitely decided whether any changes will be made.

Okla., Oklahoma City.—The Oklahoma City Chamber of Commerce, it is reported, has closed an agreement with the Denver, Kingfisher & Gulf Railroad Co. to build a line from Oklahoma City northwest to Piedmont, 19 miles, and thence through 11 counties in Oklahoma across the Panhandle of Texas and into New Mexico. The line is to be completed from Oklahoma City to Kingfisher, Okla., by January 1 next, and will be operated by either gasoline cars or steam engines. The officers are J. M. McDonald of Kansas City, president; O. T. Gregory of Buffalo, N. Y., first vice-president; F. C. Muender of Shattuck, Okla., second vice-president; D. K. Cunningham of Kingfisher, Okla., secretary; W. W. Bonson of Dubuque, Iowa, treasurer. The other directors are R. Pappe of Kingfisher and H. W. Seipe of Kiel, Okla. Other stockholders are J. S. E. Washburn of Madison, Wis.; F. G. Maston of Kansas City, and

E. H. Helton of Shattuck, Okla. President McDonald says that construction will begin immediately, and the line will be completed as far as Kingfisher by January 1 next.

Okla., Tulsa.—Steps are being taken to revive the plan to build the Kansas City, Tulsa & Southern Railway started about five years ago for a road from Joplin, Mo., to Tulsa, Okmulgee, McAlester and other points in Oklahoma, and thence to Paris, Tex. The officers are: Jay Forsythe, president; W. H. Hendren, chief engineer and general manager; W. A. Cook, treasurer; C. B. Lynch, secretary; H. B. Talley, attorney, all at Tulsa, Okla.

S. C., Anderson.—The Greenville, Spartanburg & Anderson Railway Co. is inviting bids to rebuild the bridge over Cubbard's Creek, between Anderson and Belton. W. J. Thackston is president at Anderson, S. C.

S. C., Badham.—The Dorchester Lumber Co. of Badham proposes to build a mile of railroad and is asking bids for construction.

S. C., Columbia.—The Columbia & Atlantic Railway & Steamship Co. has applied for a charter and will build a line several miles long from Columbia to a point on the Congaree River south of the city, with branch lines to warehouses. The incorporators are T. C. Williams, Edwin S. Williams, John A. Woodward and G. W. Halliway.

S. C., Greenville.—E. H. McCullough is making a survey for the proposed Greenville & Spartanburg Electric Railway.

S. C., McBee.—The South Carolina & Western Railroad Co. is reported to have begun construction at McBee.

Tenn., Jackson.—A. B. Harris of the Illinois Central Railroad and Atwell Thompson, City Engineer, will, according to a dispatch, begin survey immediately for the proposed belt line.

Tenn., Memphis.—The Southern Railway, it is reported, has purchased a large tract of land from Calhoun Ave. to Broadway Ave., and near South 3d St., to establish new freight yards. W. H. Wells is chief engineer of construction at Washington, D. C.

Tenn., Smithville.—The Tennessee Central, it is reported, contemplates building a branch to Smithville. L. F. Lonnblad is chief engineer at Nashville, Tenn.

Tex., Abilene.—The Texas Central Railway, according to a dispatch, is considering a proposition to build an extension of about 30 miles to Abilene. H. S. McCall is resident engineer at Waco, Tex.

Tex., Asherton.—The Asherton & Gulf Railroad, it is reported, will be extended to Eagle Pass, about 75 miles. Asher Richardson is president and general manager at Asherton, Tex.

Tex., Cleburne.—F. G. Pettibone, vice-president of the Gulf, Colorado & Santa Fe Railway, Houston, Tex., is quoted as confirming the report that about \$300,000 will be spent for freight yards in Cleburne and other facilities. F. Merritt is chief engineer at Galveston, Tex.

Tex., Dallas.—A director of the Texas Traction Co. is quoted as saying that a line will be built from Dallas to Waco, Tex., about 90 miles. J. F. Strickland of Dallas is president.

Tex., Greenville.—The Eastern Texas Traction Co. will build 20 miles of line from Wolfe City to Greenville, which will be extended to Bonham and Dallas. Right of way is being secured. Headquarters at Greenville. The directors are S. B. Perkins of Greenville, J. H. Blocker of Wolfe City; R. N. White, treasurer; Joseph F. Nichols, secretary; J. B. Murphey, general manager; Glen A. Coulson and W. M. McBridge, all of Greenville, Tex.; H. E. Vaughan, J. H. Myrick, H. C. Tittsworth and J. Riley Green, all of Wolfe City, Tex.

Tex., Palacios.—An officer of the Palacios, San Antonio & Pecos Valley Railway is reported as saying that the company will build from Palacios northwest via San Antonio to Pecos, Tex., about 480 miles. Preliminary survey this summer. No contracts yet let. J. T. Pierce is president and H. W. Dean secretary and manager at Palacios, Tex.

Tex., Quanah.—The Quanah, Seymour, Dublin & Rockport Railway Co., which proposes to build about 500 miles of line from Quanah via Seymour, Dublin and Austin to Rockport, Tex., has headquarters at 114 Austin National Bank Bldg., Austin, Tex. About 5 per cent. of the country through which the line will run is rough and 20 per cent. rolling; the remainder is level. The directors are L. E. Walker, president, Marshall, Tex.; A. J. Eilers, Austin, Tex.; Harry Koch and Porter A. Whaley of Quanah, Tex.; G. S. Plants of Seymour, Tex.; M. C. Witcher of Dublin, Tex.; C. D. Johnson of Rockport, Tex.; H. E. Ford and W. R. Davie of Austin, Tex. The treasurer is H. Pfaeflin and the secretary W. L. Vining.



Tex., San Angelo.—The A. M. Moore Construction Co. of Kansas City, Mo., is reported to have contract for building the Santa Fe branch from San Angelo to Sterling City, 47 miles. Work is under way.

Tex., Smithville.—James H. Collins, consulting and contracting engineer, 88 La Salle street, Chicago, Ill., says that he will finance and build the Smithville & Aransas Pass Railroad as soon as satisfactory preliminary arrangements are made, which he expects will be accomplished in 30 days.

Tex., Temple.—The Temple Northwestern Railway Co., according to a dispatch, has let contract for bridging to C. G. Patton of Houston, Tex., and for piling to W. D. Parish of Temple, Tex. Already 62 teams are at work between Gatesville and Hamilton, and 52 between Gatesville and Temple.

Tex., Temple.—G. S. Vivian of Chicago, representing a syndicate, is reported working on a proposition to build the contemplated interurban electric railway between Temple and Waco, about 30 miles. G. E. Wilcox of Temple or W. L. Prather of Waco, Tex., may give information.

W. Va., Clarksburg.—The Clarksburg & Weston Electric Railway Co. will build 24 miles of line from Clarksburg to Weston, W. Va., including five bridges. The country is rolling; officers, S. L. Watson, president; C. W. Watson, vice-president; secretary and treasurer, Walton Miller; general manager, James O. Watson; chief engineer, D. D. Britt, all of Fairmont, W. Va. Date for receiving bids for construction not set.

W. Va., Elkins.—Concerning the report that the Coal & Coke Railway proposes to build an extension from Elkins to Rowlesburg, W. Va., an officer says that a line is being surveyed to determine the cost of construction. Another official is quoted as saying that a branch will be built to connect with the Dry Fork Railroad at Parsons. A letter to the Manufacturers' Record says that Ashton A. Chapman is engineer of survey for this extension. It is denied that contract has been let to him. The construction contemplated is about 30 miles.

W. Va., Fairmont.—The Fairmont & Northern Traction Co. is building 1½ miles of line from Bellevue to Fairview via Paw Paw Creek, including five concrete bridges and two steel bridges. Talbot Bros. of Fairmont are the contractors. The officers are: President, S. L. Watson; vice-president, C. W. Watson; treasurer and secretary, Walton Miller; general manager, James O. Watson; chief engineer, S. B. Miller, all at Fairmont.

W. Va., Fairmont.—The Fairmont & Clarksburg Traction Co., it is reported, will issue \$400,000 more of preferred stock to finance the proposed extension from Clarksburg to Weston, W. Va., 24 miles. James O. Watson and others of Fairmont are interested.

W. Va., Pemberton.—The Virginian Railway, according to a press report, will build a line from Pemberton to Beckley, W. Va., about six miles. H. Fernstrom is chief engineer at Norfolk, Va.

W. Va., Wellsburg.—The Pennsylvania Railroad, it is reported, will build a new bridge over the Bethany turnpike at Wellsburg, besides making improvements to tracks at a cost of about \$15,000. R. Trimble is chief engineer maintenance of way at Pittsburg, Pa.

## STREET RAILWAYS

Ga., Valdosta.—The Valdosta Street Railway Co. contemplates building an extension of several miles. W. S. West is president and general manager.

Mo., Joplin.—Franchise has been granted to the Joplin & Pittsburg Railroad Co. to build a double-track extension on West 4th St. to Electric Park. R. W. Harris is general manager at Pittsburg, Kans.

Tenn., Memphis.—The Memphis Street Railway Co. will build an extension of about 2½ miles. T. H. Tutwiler is president and general manager.

Tex., Austin.—C. V. Burkhead of San Antonio, N. A. Dawson and James T. Priest of South Austin and Frank M. Maddox have applied to County Commissioners for a street-railway franchise in South Austin.

Va., Richmond.—The Richmond & Henrico Railway Co. will build an electric street railway eight miles long. The Burton Construction Co., 9th and Broad Sts., Richmond, Va., is the contractor. W. O. Burton is president; T. S. Winston, vice-president; H. D. Eichelberger, secretary and treasurer; L. Hankins, engineer in charge.

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.**

Boats, etc.—Legg Brick Co., Calhoun, Ga., wants to correspond with builders and designers of boats and machinery, barges, etc., for river traffic where current is swift and shallow; also interested in motor boats.

Boiler.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants 100-horse-power boiler (return-tubular or "Economic" preferred).

Bollers.—Himalaya Planting & Manufacturing Co., J. G. Martel, president, Tallien, La., wants prices on 350-horse-power bollers.

Box Machinery.—See "Crate Machinery, etc."

Broom Machinery.—G. W. Koerner, Commissioner, Department of Agriculture and Immigration, Richmond, Va., wants addresses of manufacturers of broom machinery.

Brick.—Office of Commissioners of the District of Columbia, Washington, D. C. Proposals will be received until May 23 for furnishing District government with the following materials during fiscal year beginning July 1, 1910, and ending June 30, 1911: Granite curbing, asphalt paving blocks, repressed vitrified invert sewer bricks, repressed vitrified paving blocks, red sewer bricks, Portland cement, terra-cotta sewer pipe, miscellaneous castings. Forms of proposal, specifications and necessary information may be obtained upon application to Property Clerk, D. C., 320 District Bldg.; Cuno H. Rudolph, John A. Johnston, William V. Judson, Commissioners D. C.

Bricks.—A. L. Myers, Newton, Miss., wants prices on white enameled bricks.

Bridge Construction.—Greenville, Spartanburg & Anderson Railway, W. J. Thackston, president, Anderson, S. C., invites bids for rebuilding of Cubbard's Creek bridge on interurban railway between Anderson and Belton, S. C.; plans and specifications on file with traction company at Anderson.

Bridge Construction.—Bids will be received at office of St. George Richardson, County Engineer, Memphis, Tenn., until May 9 for construction of 60-foot steel span and two 20-foot approach spans over creek at Bartlett, Tenn.; plans and specifications on file at office of County Engineer; T. H. Pearson, bridge superintendent.

Bridge Construction, etc.—Park Commissioners, R. E. Brownell, chief engineer, Oklahoma City, Okla., will receive bids until May 9 for construction of dam, spillway, corral and concrete bridge in Northeast Park; plans, specifications and profiles on file in office of chief engineer of board, 301 City Hall; cash or certified check for 3 per cent. of bid to accompany each proposal.

Bridge Construction.—C. G. Reeves, Comptroller, Shreveport, La., will receive bids until May 10 (deferred date) for construction of steel traffic bridge over Red River as per plans and specifications on file in City Engineer's office at Shreveport, and of Ira G. Hedrick, 1118 McGee St., Kansas City, Mo.; bids will be received for both entire bridge, including substructure and superstructure, and also for substructure only; each bid for entire structure to be accompanied by certified check for \$5000, and for substructure only by certified check for \$2000; estimated cost of bridge complete, \$300,000; of substructure only, \$100,000. Mr. Reeves will furnish printed copy of ordinances of Police Jury of Bossier parish and of city of Shreveport governing payment for said bridge.

Bridge Piers.—North East Coal Co., Coal Exchange, Wilkes-Barre, Pa., will receive bids until May 15 for construction of four piers aggregating 1150 cubic yards concrete and 2500 feet round piling; plans and specifications may be seen at office of company or at office of J. F. Prindible, engineer, Paintsville, Ky.; usual rights reserved.

Broom Machinery.—N. W. Dunn, McKenney, Va., wants machinery for manufacturing brooms.

Building Materials.—J. O. Cundiff, North Ave., near Kelley Ave., Mt. Washington, Md., wants prices (delivered at building) on sand, lime, brick and cement.

Building Materials.—D. Rotundo, Kissimmee, Fla., wants prices on brick, roofing, doors and windows.

Building Materials.—R. M. Crisman, P. O. Box 393, Oklahoma City, Okla., wants prices on plumbing, plastering, painting, decorating, steel, plate glass, sash and doors.

Building Materials.—Knights of Pythias, F. J. Schroeder, secretary, Oakland, Md., wants prices on concrete, concrete blocks, stucco work, steel sheathing and electrical work.

Canal Construction.—Board of Drainage Commissioners of State of Florida, J. C. Luning, secretary, State Capitol, Tallahassee, Fla., will receive bids until June 15 for excavating five drainage canals in the Everglades; aggregate length, 235 miles; construction requires excavating of 18,000,000 cubic yards of earth and 6,000,000 cubic yards of rock. Specifications and blank proposal forms can be obtained by application to office of J. O. Wright, chief drainage engineer, Tallahassee; each bid to be accompanied by certified check for 2 per cent. of amount of proposal, payable to W. V. Knott, State Treasurer.

Cars, Trucks, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until May 26 for furnishing hand cars, push cars, warehouse trucks, wheelbarrows, jacks, anvils, vises, forges, etc. Blank and general information relating to circular No. 578 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Cars.—Wrightsville, Adrain & Lyons Railway Co., W. F. Staten, secretary, Adrain, Ga., will want two combined passenger and baggage cars; also two passenger cars.

Cars, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until May 24 for furnishing steel flat cars, steel castings, bronze, muntz metal, rivets, driftbolts, boat spikes, etc. Blank and general information relating to circular No. 582 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Corner Bars.—See "Glass."

Column Bar.—Grant & Botts, West Palm Beach, Fla., want prices f. o. b. on one nickel-plated column bar.

Cotton-webbing Machinery, etc.—John Manufacturing Co., Kings Mountain, N. C., wants to correspond with builders of machinery to manufacture cotton webbing and hammocks.

Crate Machinery, etc.—June & Cate, Hammond, La., want prices on machinery for manufacturing fruit and vegetable boxes and crates.

Culvert Construction.—City Council, Denison, Tex., will open bids May 7 for construction of culvert with concrete top across Nelson St.; plans and specifications on file in office of J. D. Yocom, City Secretary; work to be under supervision of acting engineer.

Dam Construction.—Wehr, Walden & Dukehart, 412 Continental Bldg., Baltimore, Md., ready for bids to construct concrete granite dam; 250 feet long; 2000 cubic yards.

Dies.—P. C. Tumlinson, 213 East Houston St., secretary Universal Insect Trap Co., San Antonio, Tex., wants dies for cutting galvanized-iron pattern.

Derricks.—Himalaya Planting & Manufacturing Co., J. G. Martel, president, Tallien, La., wants prices on cane-hoisting derricks.

Desks, etc.—City, E. M. Cook, Mayor, Haz-

elhurst, Miss., will receive bids on desks, etc., for school buildings.

Dredge Bucket.—Doulut & Williams, 213 Macheca Bldg., New Orleans, La., wants orangepeel dipper; one yard and one and a quarter yards.

Dredge Bucket.—Hobbs-Ives Equipment & Machinery Co., Seaboard Bank Bldg., Norfolk, Va., in market for second-hand clamshell bucket; suitable for digging sand; three-quarter or one-cubic-yard capacity.

Drugs, etc.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) catalogues and prices on toilet articles and drugs.

Dump Cart.—Taylorsville Cotton Mill Co., Taylorsville, N. C., wants contractor's iron-body dump cart, two wheels, to hold one cubic yard earth or one ton coal.

Electrical Equipment.—Wm. C. Ritter, Newport News, Va., wants prices on 10 to 20-horse-power motor and electric pump.

Electric-lighting System.—Office Constructing Quartermaster, Fort Crockett, Galveston, Tex. Proposals will be received until May 31 for construction of electric-lighting system; information upon application; P. Whitworth, Captain and Quartermaster, U. S. A.

Electrical Machinery.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants generator; about 50-kilowatt, 125-volt, to run at 280 to 300 R. P. M.; for direct connection to engine.

Electrical Machinery.—Doe River Lighting & Power Co., J. H. Grayson, general manager, Elizabethton, Tenn., in market for two 1000-kilowatt generators, each three-phase, 90 cycles, 2200 volts; three transformers to carry one of these units and step current up from 2200 to either 22,000 or 33,000 volts; three transformers to step this voltage back to 2200 volts; switchboards with all instruments, copper wire and all line material for 22 miles of transmission line of high voltage; three units of turbines to be operated under 50-foot head and develop 1200 horsepower to each unit; two governors to control speed regulations; bidders on hydro plant expected to have representatives inspect property not later than May 15 and submit proposals not later than June 1; electrical proposition will be taken up as soon as speed of water-wheels is fully determined.

Electrical Equipment.—Burton Construction Co., 9th and Broad Sts., Richmond, Va., wants prices on electrical equipment, poles, wiring, etc.

Electrical Machinery.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants two belted electric generators, 220 volts, direct current; 50 to 75-kilowatt direct-connected set, 125 volts; one for 220 volts; also several 15-horse-power motors, 110 volts, direct current.

Engines.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants two Corliss engines, 75 to 125 horse-power each.

Engine.—Kershaw Oil Mill, Kershaw, S. C., wants second-hand Corliss engine, size 18x42; give description, price, etc.

Farm Implements.—H. T. Chandler, 800 21st St. N. W., Washington, D. C., wants to correspond with manufacturers of farm implements.

Fire Protection.—See "Water System."

Floor-tile Machinery.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) catalogues and prices on machines for making floor tiles.

Gasoline Engine.—John G. Duncan Company, Box 265, Knoxville, Tenn., wants prices on 50 to 90-horse-power gasoline engines; stationary type; weight about 8000 pounds.

Gasoline Engine.—See "Sawmills."

Glass, etc.—A. L. Myers, Newton, Miss., wants prices on plate and coppered prism glass; also Thorne "Holdfast" corner bars for plate glass.

Gravel.—A. L. Myers, Newton, Miss., wants prices on gravel for concrete and roofing.

Heater.—Wm. C. Ritter, Newport News, Va., wants prices on hot-water heater.

Heating and Ventilating.—John H. Disque, chairman Board of Education, Gadsden, Ala., wants prices on steam or air heating with suction ventilator device.

Heating Plants.—Utley & Utley, 329½ Cherry St., Helena, Ark., want bids on heating for 90-room apartment-house; also for two dwellings. (See "Apartment-houses" and "Dwellings.")

Heating Plant.—Board of Education, W. J. Hamlett, president, Milford, Tex., wants prices on engine and equipment for hot-air heating plant for 11-room school.

Heating Plant.—Knights of Pythias, F. J. Schroeder, secretary, Oakland, Md., wants prices on heating plant.

Heating Systems.—Wm. C. Ritter, Newport News, Va., wants prices on steam or hot-water systems for three buildings, including radiators, pipes, etc.

Hospital Equipment.—Henry E. Bonitz, Wilmington, N. C., wants catalogues and prices on hospital equipment.

Housefurnishings.—Biddle Bros., 110 Vine Ave. east, Knoxville, Tenn., wants dealers' prices on iron beds, tin and enamel ware, chairs, etc.

Iron Beds.—See "Housefurnishings."

Iron and Steel.—A. L. Myers, Newton, Miss., wants prices on cast iron and steel.

Lathe.—D. W. Martin, Florence, S. C., wants prices on engine lathe, 12-inch swing, 6-foot bed.

Laundry Machinery.—Wm. C. Ritter, Newport News, Va., wants prices on laundry machinery.

Lighting Fixtures.—B. W. Blake, Professional Bldg., Baltimore, Md., wants prices on gas and electrical fixtures.

Locomotive.—Kentucky River Hardwood Co., Jackson, Ky., wants second-hand Climax logging engine for 35-pound steel rail, 42-inch gauge; horizontal boiler, double-gear, 15 to 20-ton, good condition, complete with tools; must know number of years in use and other particulars.

Locomotives.—Wrightsville, Adrain & Lyons Railway Co., W. T. Staten, secretary, Adrain, Ga., will want two locomotives.

Machine Tools.—See "Tools."

Machine Tools.—Biloxi Machine Works, 448 Delaney St., Biloxi, Miss., wants prices on 36x14 lathe; also radial drill and planer.

Malleable Iron.—See "Truck Parts."

Metal Ceiling.—A. L. Myers, Newton, Miss., wants prices on metal ceiling.

Metal Ceilings.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) catalogues and prices on metal ceiling.

Metal-working Machinery.—Adams Washer Co., M. O. Adams, president, Kansas City, Mo., will open bids in 30 to 60 days for sheet-metal machinery.

Mill Work.—B. W. Blake, Professional Bldg., Baltimore, Md., wants prices on mill work for \$6000 dwelling.

Mining Machinery.—Asher Coal Mining Co., Washtoto, Ky., opens proposals at once for mining machinery.

Motor Boats.—See "Boats."

Novelty Manufactures.—J. C. Beckman, Tarpon Springs, Fla., wants to correspond relative to placing order, on royalty basis, for manufacture of necktie or scarf fastener.

Oil Heaters.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) catalogues and prices on kerosene-oil heaters.

Overall Machinery.—R. B. Berkeley, care of Farmville Herald, Farmville, Va., wants prices on machinery for overall plant working 100 hands.

Pans.—C. P. De Shazo, No. 1612 North Seventh Ave., Birmingham, Ala., wants to correspond with manufacturers of round-pressed pans to be used in gas or gasoline stove ovens.

Paper-tube Machinery.—Cumberland Valley Paper Box Co., Franklin and Jonathan Sts., Hagerstown, Md., wants machinery to manufacture mailing tubes.

Paving.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until May 16 for paving Linwood, Classen, Young and Drexel boulevards, 31st, 38th, 29th and other streets; all work, including paving, grading, concrete curb and guttering, oak curbing, etc., to be in accordance with plans and specifications on file in office of City Clerk; each bid to be accompanied by certified check for 3 per cent. of same.

Paving.—City Secretary, Waco, Tex., will receive bids until May 13 for paving Austin Ave. from 8th St. to 18th St.; alley leading from 3d St. to 4th St., between Austin Ave. and Franklin St., and alley leading from 3d St. to 4th St., between Austin Ave. and Washington St. Bids for pavement on Austin Ave. may be for asphaltic concrete, bituminous macadam, Hassam compressed concrete, bitulithic or vitrified-brick pavement; bids for each alley to be for vitrified brick, but may be to lay brick either edgewise or flat; bids to be entirely separate; plans and specifications and estimated amounts on file in office of City Engineer; bid for Austin Ave. work to be accompanied by certified check for \$5000, and for alleys by certified check for \$250; H. B. Mistrot, Mayor.

Paving.—Board of Local Improvements, Washington, N. C., will open bids May 12 for improving East and West Main and 2d Sts., Market and Water Sts. and Union Al., about

6130 linear feet; improvements to include: grading, curbs, gutters, bituminous macadam or brick pavement, catch basins and cement sidewalks; will also receive bids at same time for furnishing material necessary, plans, specifications and proposal blanks can be obtained at office of D. B. Packard, City Engineer, upon deposit of \$10; each bid to be accompanied by certified check for 5 per cent. of bid.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will receive bids until May 9 for paving Elm St. from Erway to Market St.; each bidder to bid separately on following materials: Vitrified brick paving blocks, Bois d'Arc blocks, creosoted pine blocks and concrete curbs; specifications on file in office of City Secretary; certified check, \$1200.

Paving.—Depot Quartermaster's Office, Washington, D. C. Proposals will be received until May 10 for tarvia on roadway in Arlington (Va.) National Cemetery; information furnished on application. Address Capt. H. L. Pettus, Quartermaster, U. S. Army, in charge of depot.

Paving.—M. L. John, Mayor, Laurinburg, N. C., will receive bids until May 23 for 2500 square yards of concrete sidewalk paving, with curb and gutters; plans and specifications prepared by F. F. Wetmore, engineer, Laurinburg, on file in office of Mayor and of City Clerk; plans furnished upon deposit of \$5; certified check to accompany bids, 5 per cent. of bid.

Paving.—E. A. Kingsley, engineer for district, Little Rock, Ark., will receive bids until May 14 for paving West 6th and Victory Sts. with asphalt; plans and specifications on file with Mr. Kingsley; certified check, \$1000.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will receive bids until May 9 for paving Commerce St. from Harwood St. to H. & T. C. Railway; each bidder to bid separately on following materials: Asphaltic concrete paving, bitulithic, rock asphalt, vitrified brick or block, creosoted wooden blocks, concrete curb and concrete gutter; specifications on file in office of City Secretary; certified check for \$750 to accompany each bid.

Planer.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants machinists' planer to take about 60 inches between housings, etc.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) samples and prices on metal and shoe polishes; also on cleaning stuffs.

Pump.—See "Electrical Equipment."

Rails.—Board of Control, W. W. Heard, president, Baton Rouge, La., will open bids May 15 for two one-half or three miles of relaying or new American steel rails, 35 or 40 pounds, f. o. b. cars Angola, La.

Rails.—J. A. Duke, Fair Bluff, N. C., wants 100 tons second-hand 20-pound railroad iron.

Railroad Equipment, etc.—Himalaya Planting & Manufacturing Co., J. G. Martel, president, Tallien, La., wants prices on railroad equipment, etc.

Railroad Ties.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until May 28 for furnishing cross and switch ties, annual estimate for year ending June 30, 1911. Blanks and general information relating to Circular No. 579 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Refrigerating Machinery.—T. H. Beals, Judsonia, Ark., will want small refrigerating machine.

Reinforcing Wire.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) prices on reinforcing wire for concrete buildings.

Reservoir Construction.—Bids will be received by trustees for water-works and improvement bonds, W. M. Bostwick, Jr., chairman, Jacksonville, Fla., until June 6 for building 3,000,000-gallon covered reinforced concrete reservoir on water-works ground; for plans, specifications or other information apply to R. N. Ellis, C.E., superintendent; certified check for \$500 to accompany each bid; in addition to bid according to plans

and specifications furnished, board will consider bids submitted with full set of drawings and specifications as alternative bid.

Road Construction.—John B. Ashe, County Auditor, Houston, Tex., will receive bids until May 13 for paving four miles of Lynchburg and Crosby Rd. and remainder of Seabrook Rd.; plans and specifications on file with County Engineer.

Road Construction.—Executive committee (representing Starkville, Miss., Agricultural College and Oktibbeha county) will receive bids at office of president of Agricultural and Mechanical College, Agricultural College, Miss., until May 17 for construction of 1½ miles of macadam road from Starkville to Agricultural College; road is to be covered with broken stone 6 inches deep and 24 feet wide; certified check for \$250 to accompany each bid. For information or specifications address D. W. Brown, professor civil engineering, Agricultural College, Miss.

Road Construction.—John M. Murch, County Auditor, Galveston, Tex., will receive bids until May 16 for ditching, grading, culvert and surfacing and paving with rock, gravel or mudshell or combination of either county road along G. H. & H. R. R., beginning at Harris county line near League City and extending through League City, Dickinson and Lamarque to Texas City Junction, distance of about 16 miles; also same work on road along Santa Fe Railroad, beginning at Brazoria county line near Alcoa and extending to Highland Bayou, through Alcoa, Arcadia, Alta Loma and Hitchcock, distance of about 18 miles; all in accordance with plans and specifications on file in County Auditor's office, from whom copies can be had on application; proposals to be accompanied by certified check for 5 per cent. of bid.

Road Construction.—Bids will be received at office of Wm. M. Murrell, Commonwealth's Attorney, 14 Law Bldg., Lynchburg, Va., until May 10 for construction of 1.6 miles of macadam road on extension of Campbell Ave. toward Campbell, Va.; plans and specifications may be seen at office of John T. McKinney Construction Co., National Exchange Bank Bldg., Lynchburg, or of State Highway Commissioner, P. St. J. Wilson, Richmond, Va.; certified check for \$250 to accompany each bid; specifications will be furnished on application to State highway commissioner; proposals to be addressed to John T. McKinney, 14 Law Bldg., Lynchburg, Va.

Road Construction.—Caroline County Commissioners, J. L. Dukes, clerk, Denton, Md., will open bids May 10 for grading and macadamizing .61 miles of road on Bridge St. in Federalburg, Md.; proposals to be made on forms furnished by State Geological Survey Commission, to be obtained through its office in Baltimore, Md.; certified check, \$200.

Road Construction.—Proposals will be received by Board of Public Roads of Spotsylvania County at the office of Business Men's Association, Fredericksburg, Va., until May 18 for construction of 14 miles of gravel road in Chancellor district, 19 miles of gravel road in Courtland district and three-quarters of a mile of macadam road in Courtland district; plans and specifications on file at office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; of Clerk of Spotsylvania County, Spotsylvania, Va.; M. B. Rowe, Fredericksburg, Va.; specifications furnished on application to P. St. J. Wilson; certified check for \$250 to accompany each bid; engineer will be at Spotsylvania May 10 to go over work with prospective bidders; address bids to Board of Public Roads, care M. B. Rowe, Fredericksburg, Va.

Road Machinery.—H. T. Chandler, 800 21st St. N. W., Washington, D. C., wants to correspond with manufacturers of road machinery.

Roofing.—City, E. M. Cook, Mayor, Hazelhurst, Miss., will receive bids on roofing for present building.

Safe, etc.—Citizens' Bank, E. N. Roth, president, Thibodaux, La., wants prices on safe, vault, bank fixtures, etc.

Safe, etc.—R. E. Graham, president Farmers' Exchange Bank, Stillmore, Ga., wants prices on safe and bank fixtures.

Saw.—T. V. Cashen Lumber Co., Jacksonville, Fla., wants slab resaw; band or circular (circular preferred).

Sawmills.—Lake Land & Lumber Co., James H. Williams, manager, Monroe, N. C., wants prices on sawmills, planing mills and gasoline engine for plant at Leesburg, Fla.

Sewer Construction.—Bob Parman, City Clerk, Oklahoma City, Okla., will open bids May 9 for construction of various sewers, including lateral sewer in Central Park, Ross-Mann, Grand View and Central Northwest additions; extension of Walker Ave. sewer, main storm sewer on Francis and McKinley

Aves., etc.; plans and specifications on file with City Clerk.

Sewers.—Board of Public Improvements, Maxine Reber, president, Room 300 New City Hall, St. Louis, Mo., opens bids May 17 for construction of Baden public sewer, including reinforced concrete open sewer 475 feet long, reinforced concrete closed sewer 2590 feet long, closed brick sewer 89 feet long, closed reinforced concrete sewer 1545 feet long, with junctions, manholes, etc.; deposit required, \$6625. Opens bids May 24 for South Harlem joint district sewer, including reinforced concrete sewer 61 feet long, reinforced concrete sewer 6488 feet long, with junctions, manholes, etc.; deposit required, \$5746. Opens bids May 31 for constructing South Harlem joint district sewer, including reinforced concrete sewer 2919 feet long, reinforced concrete sewer 4031 feet long, branch brick sewer 1043 feet long, branch brick sewer 190 feet long, with junctions, manholes, etc.; deposit required, \$5529. Blank forms furnished for proposals. Plans, specifications and forms of contract on view at office of board and of Sewer Commissioner; copy of plans and specifications furnished on deposit of \$50.

Sheet-metal Stampings.—See "Novelty Manufactures."

Sheet-iron Manufactures.—P. C. Tumlinson, secretary Universal Insect Trap Co., 213 East Houston St., San Antonio, Tex., wants to correspond relative to placing order for manufacture of trap for boll weevil, etc.; trap four feet high; lamp attraction.

Steel Beams.—Grant & Botts, West Palm Beach, Fla., want prices f. o. b. on I beams, 40 pounds to foot.

Steel.—See "Building Materials."

Steel Tanks.—Proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 4 for steel fuel-oil and gasoline storage tanks at naval stations on U. S. naval property at Bradford, R. I.; Norfolk, Va.; Charleston, S. C.; Key West, Fla.; Guantanamo, Cuba, and San Juan, P. R. Plans and specifications can be obtained on application to Bureau; R. C. Hollyday, chief of Bureau.

Sugar Machinery.—Himalaya Planting & Manufacturing Co., J. G. Martel, president, Tallien, La., wants prices on crusher and larger double effects.

Tank.—Reynoldsville Silica Co., Reynoldsville, Ill., A. A. Lowry, manager, wants second-hand tank for storage of fuel oil; 10,000 or 12,000 gallons capacity.

Tank.—Wm. C. Ritter, Newport News, Va., wants prices on 1000-gallon galvanized tank.

Tents.—W. O. Smith & Co., F. 23, Produce Exchange, New York, wants (for South American firm) catalogues and prices on portable canvas houses for use as army hospitals.

Tin and Enamel Ware.—See "Housefurnishings."

Tiling.—A. L. Myers, Newton, Miss., wants prices on vitreous tile for floors and tile letters.

Traction Engines.—J. E. Craddock, Minneola, Fla., wants information and prices on traction engines for logging.

Tools.—New Era Gas Engine Co., Dayton, O., wants catalogues and prices on small tools and appliances for gas-engine works.

Truck Parts.—A. G. Stopple, 135 Ross Ave., Dallas, Tex., wants to correspond with manufacturers of heavy wheels, axles, springs, malleables, etc., for assembling heavy floats or freight transfer trucks.

Tramway.—T. A. Dillon, Tuscarora, N. C., wants to correspond with parties having railway to lease for tramway purposes.

Veneer Machinery, etc.—Norfolk Woodworking Co., Box 365, Norfolk, Va., wants second-hand machinery for manufacture of veneer board and basket stock.

Water System.—McEwen Lumber Co., Asheville, N. C., wants catalogues, prices, etc., on 50 to 75-foot tower for fire protection; also on pipe, hydrants and hose.

Waterproofing.—Sealed proposals will be received at office of City Clerk, Asheville, N. C., until May 13 for waterproofing 5,000,000-gallon concrete reservoir built by Faragher Engineering Co.; right to reject bids reserved; for full information apply to B. M. Lee, City Engineer.

Water-works.—City of Alpine, Tex., will open bids about June 25 on pump and engine to pump water up incline about 400 yards; also wants quotations on pipe. Address J. H. Derrick.

Water-wheels.—See "Electrical Machinery" item of Doe River Lighting & Power Co.

Wheels.—See "Truck Parts."

Whip Machinery, etc.—Dixie Stock Powder & Chemical Co., 1 Hill St., Atlanta, Ga.,



wants information on material, including covering, for manufacturing whips; also prices on machinery.

Woodworking Machinery.—See "Veneer Machinery, etc."

Woodworking Machinery.—J. P. Fort Lumber Co., Morristown, Tenn., wants prices on mortise, boring and binding machinery, etc.

## INDUSTRIAL NEWS OF INTEREST

### American Hoist & Derrick Co.

The American Hoist & Derrick Co. of St. Paul, Minn., announces that its new address at Chicago is 713 Fisher Bldg., northwest corner of Van Buren and Dearborn Sts.

### Cooksey & Maxwell, Architects.

Frank W. Cooksey and Fred B. Maxwell have associated for the practice of architecture. Their firm name is Cooksey & Maxwell, with offices at 597 and 598 Forsyth Theater Bldg., Atlanta, Ga.

### Holophane Co.'s Architectural Department.

The Holophane Company, 227 Fulton St., New York, announces that its architectural department has been changed to 36 West 29th St., in that city. A. J. Marshall is manager of this department.

### Will Use Gabriel Reinforcement.

The reinforcing steel required for the Capitol Hill School, to be erected at Oklahoma City, will be furnished by the Gabriel Concrete Reinforcement Co. of Detroit, Mich. R. B. Barrett, engineer, handles this company's products at Oklahoma City, his offices being in the Campbell Bldg.

### Crozer-Pocahontas Coal in England.

Arrangements have been completed by the Crozer-Pocahontas Company whereby D. Flack & Sons, London, England, are made general foreign agents for its bunker and cargo coal. The Crozer-Pocahontas Company is the selling organization for the various coal-mining companies in the Pocahontas field controlled by the Crozer interests.

### To Destroy Boll-Weevils.

The Universal Insect Trap Co. has been organized with a capital stock of \$100,000 and has offices at 213 East Houston St., San Antonio, Tex. P. C. Tumlison is secretary of the company, and states it will manufacture a trap for the destruction of boll-weevils and other insects that prey on cotton. This trap will be about four feet high and have lamp-light attachment.

### Establishes Storeroom in St. Louis.

Owing to the increasing use of electrical vehicles in the Central West, and therefore an increasing demand for "Exide" batteries and renewals, the Electric Storage Battery Co., Allegheny Ave. and 19th St., Philadelphia, has found it necessary to establish a storeroom for "Exide" material at 16th and Pine Sts., St. Louis. These increased facilities will doubtless be appreciated by users of "Exide" batteries in this territory.

### To Inspect New Plant.

Invitations were recently extended to friends and patrons of the Triumph Electric Co. and the Triumph Ice Machine Co. of Cincinnati, O., to attend the inspection of the companies' new Oakley plant on April 30. This inspection was participated in by the Business Men's Club, Chamber of Commerce, Manufacturers' Club, Cincinnati Industrial Bureau and the Cincinnati Metal Trades Association.

### "New Era" Auto-Cycle Department.

The New Era Gas Engine Co. of Dayton, O., has sold its auto-cycle department and this department's entire plant and equipment, except such tools, appliances, patterns, etc., only adapted to the gas-engine plant. The company has interested a large amount of new capital, and is planning to equip a new factory for the exclusive manufacture of its well-known "New Era" gas and gasoline engines. Catalogues and prices are wanted on all sorts of small tools and appliances.

### Indianapolis Machinery Exchange.

The Indianapolis (Ind.) Machinery Exchange has reorganized and elected A. L. French, president; William Vesey, vice-president; S. P. Grey, secretary-treasurer, and Wm. S. Bunnell, manager. This company deals in engines, boilers, pumps, ironworking and woodworking machinery, pulleys, hangers, shafting, etc. It overhauls all the machinery offered, and when necessary rebuilds in its own shops. Among its specialties are hollow-blast grate bars and a steel fan. The

Woodworking Machinery.—Adams Washer Co., M. O. Adams, president, Kansas City, Mo., will open bids in 30 to 60 days for wood-working machinery.

Woodworking Machinery.—Cumberland Valley Paper Box Co., Franklin and Jonathan Sts., Hagerstown, Md., wants machinery to make silk ribbon blocks.

company reports an increasing trade, April having been its busiest month.

### G. B. Hartley, Engineer.

Announcement is made that F. W. Gerchow of Hartley & Gerchow, civil and mining engineers, Morgantown, W. Va., has withdrawn from the firm to accept a position as chief engineer for the Hutchinson Coal Co., Fairmont, W. Va. G. B. Hartley will continue in his profession, still retaining Col. Everhart Blerer as consulting engineer. Mr. Hartley makes a specialty of installing coal and coke plants and has recently secured larger offices preparatory to extending his practice.

### A Cuban Order for Sewer Pipe.

It is announced that a sewerage and paving contract recently awarded for the city of Havana, Cuba, was awarded on the use of the Meriwether system of reinforced concrete sewer pipe. This product is manufactured by the Lock Joint Pipe Co., 165 Broadway, New York, and approximately 200,000 feet of pipe will be used in sizes from 35 inches to 84 inches. The Cuban Engineering & Contracting Co., 17 West 42d St., New York, was awarded the contract to construct the sewers.

### Ray D. Lillibridge, Incorporated.

Ray D. Lillibridge, Inc., advertising representative, announces removal to the four offices comprising the "Tower Suite" of the Chatham National Bank Bldg., at 192 Broadway, New York, the most convenient entrance being at No. 11 John St. In these offices the company is able to combine with its general office the branch establishment maintained for eight years at No. 79 Nassau St. Messrs. Ray D. Lillibridge and William L. Rickard comprise this corporation.

### Establishes Southern Supply Department.

The Gallon Iron Works Co., manufacturer of culvert pipe, road machinery, contractors' and roadmakers' supplies, etc., has recently established a branch office and supply department at 102 South 18th St., Birmingham, Ala. This company already supplies a large Southern trade, and the establishment of a Southern branch to carry a complete stock was made necessary by the increasing demand for its products. The Birmingham office is in charge of B. E. Pool, who is an experienced civil engineer and thoroughly familiar with road building and road-building machinery. The main office of the company is at Gallon, O.

### Export Sales Increasing.

Among American manufacturers whose products have become well-known in foreign countries, as is indicated by a steadily increasing export demand, is the American Pulley Co., 4200 Wissahickon Ave., Philadelphia. This company states that it is preparing to ship 150 pulleys to the Philippine Islands, and has received orders for shipments to Egypt, Australia, India and other countries. Its domestic trade is also increasing satisfactorily, and there are few important centers in this country where its products are not in use. The company manufactures wrought steel belt and sash pulleys, pressed steel shapes, etc., which are illustrated and described in a catalogue which it has issued.

### A Quarter-Century Club.

A quarter-century club, the membership of which is limited to men who have been active factory workers for 25 years, is an organization existing at the plant of the Dodge Manufacturing Co., Mishawaka, Ind. The club is one year old and as full of life as the Dodge club, made up of all employees. In the days when this widely-known engineering company was struggling to introduce its split wood pulley, regular paydays were few and far between. The men had faith, however, and remained with the company. Twenty-five years ago there were 116 on the pay roll; one year later this was reduced to 51. Fourteen of these have died "in the harness" and 27 are still "on the job." W. B. Hosford, the first vice-president, has spent all his life with the Dodge company, starting at the bottom and advancing to his present position by merit alone. Charles End-

lich, secretary and treasurer, and W. J. Chesbro, superintendent of the wood shops, are also pioneers in service. The Quarter-Century Club meets occasionally to consider old times, but the membership is not bound by any rules.

### Increasing Its Facilities.

Anticipating an increased demand for its products, the Lombard Iron Works & Supply Co., Augusta, Ga., has recently completed a two-story addition to its mill-supply department, 40x60 feet. The company has also installed new lathes and gear cutters in its machine shop, and is at present operating with 200 workmen in its foundry, machine and boiler plants. Its products include engines and boilers, oil and ice machinery, supplies and repairs, shafting, pulleys, hangers, leather and rubber belting, hose, mill supplies, tools, etc. It is also agent for the Atlas and Erie engines, Ashworth cards, Korting and Leader injectors, turbine and water-wheels, etc.

### Receiving Important Contracts.

Important contracts which have recently been awarded the Roanoke Iron Works, Inc., founder and machinist, Roanoke, Va., attest the popularity of and growing demand for this company's products. Within the past two weeks the company has booked contracts to supply all iron and steel work for a roundhouse at Victoria, Va.; power plant at Roanoke; large hotel; large bank building at Princeton, W. Va., and for other construction. In addition it has much profitable work for its machine shop, foundry, pattern and blacksmith departments. Its products include iron, steel, tool steel, steel castings, hangers, shafting, pulleys, machinery supplies, etc.

### York Ice Machinery Sales.

Many ice and refrigerating machinery sales have been effected by the York (Pa.) Manufacturing Co. since its report of February 23. They include shipments of ice-plant and cold-storage machinery and supplies to all parts of the country, among these shipments being a 100-ton refrigerating machine in New York city; a 175-ton refrigerating machine for a brewery at Covington, Ky.; a 15-ton plate-ice plant driven by Westinghouse gas producer and engine at Woods Hole, Mass.; 20-ton refrigerating plant for the Macon branch of Swift & Co. of Chicago; 100-ton compression side for the Mathieson Alkali Works at Saltville, Va.; 20-ton compression side and 6-ton freezing and distilling system at Tiptonville, Tenn.; 25-ton ice plant at Aransas Pass, Tex., etc.

### Ingersoll-Rand Compressors.

Mason & Hanger, contractors for one of the siphon tunnels on the New York water-supply extension, are installing in their plant at Cornwall, N. Y., two large Ingersoll-Rand Corliss duplex air compressors with a capacity of 5200 cubic feet per minute. These machines have cross-compound Corliss steam cylinders and cross-compound two-stage air cylinders. They are of the enclosed, dust-proof, flood-lubrication type designed for high-speed operation at air pressure of 80 to 100 pounds. Mason & Hanger have also placed an order for a full equipment of Ingersoll-Rand rock drills, mountings, steels, etc., for their work. The Ingersoll-Rand Company of New York manufactures the machinery mentioned.

### Westinghouse Steam Turbines.

The generating equipment of the Leavenworth (Kans.) Light, Heat & Power Co. is being augmented by the addition of a 500-kilowatt Westinghouse steam turbine driving a Westinghouse 2300-volt alternator. The turbine is of high-pressure type, taking steam at 150 pounds pressure and exhausting into a Leblanc condenser which maintains a vacuum of 25 inches. The service rendered by the new equipment will be similar to that of the machines already installed, operating in parallel with the present three-phase, 60-cycle, 2300-volt distribution system. The new prime mover was furnished by the Westinghouse Machine Co., East Pittsburgh, Pa., through the Railways Equipment Co., Ltd.

### Sales of Vilter Machinery.

The Vilter Manufacturing Co., 832 Clinton St., Milwaukee, Wis., announces the following recent contracts for ice-making and refrigerating equipment: Phoenix Knitting Works, Milwaukee, 18x30-inch Corliss cylinder; Anheuser-Busch Brewing Association, St. Louis, 80-ton block ice plant; Pittsburg Brewing Co., Pittsburg, Pa., 20-ton ice tank and beer cooler; Harlem River Amusement Co., New York city, 15-ton refrigerating machine; Bridgeman-Russell Company, Duluth, Minn., ammonia piping; F. C. Gross & Bros.

Company, Milwaukee, ammonia piping; Jas. R. Hensler Ale Brewing Co., Newark, N. J., brine tank and ammonia piping; Calcasieu Mercantile Co., Lake Charles, La., 21-ton refrigerating plant; Sterling Wheelbarrow Co., Milwaukee, 14x30" heavy-duty Corliss engine; Tyler S. Redfield, Green Hill, Greenwich, Conn., can ice-making plant; Horlick's Malted Milk Co., Racine, Wis., vacuum pumps; Jung Brewing Co., Milwaukee, ammonia piping; J. D. Williams & Bros. Company, Scranton, Pa., ammonia compressor.

### Proper Tunnel Ventilation.

The importance of proper tunnel ventilation cannot be overestimated, and in the construction of the Hudson River tunnels in New York city this feature has been given due consideration. The entire supply and exhaust ventilating equipment for these tunnels were furnished by the American Blower Co., Detroit, Mich., and consist of the following fans: Hoboken Station, two 140-inch "ABC" special steel-plate fans, full housed, with pedestals, and direct connected to 40-horse-power variable-speed motors; two 100-inch "ABC" full-housed steel-plate fans, direct connected to 13-horse-power variable-speed motors; Fifteenth-Street Station, two 96-inch "ABC" cone fans, with direct-connected 30-horse-power variable-speed motors; Morton-street shaft, two 180-inch "ABC" full-housed steel-plate fans, with direct-connected 55-horse-power variable-speed motors; Hudson-Street Station, two 100-inch "ABC" full-housed steel-plate fans, with direct-connected 50-horse-power variable-speed motors. The American Blower Co. manufactures fans, engines, heaters, blowers, drykilns, brick driers, special driers, mechanical-draft apparatus, etc.

### Shop Records of Belting.

The average factory buys a large amount of belting each year, which is chopped up and put on various machines throughout its plant as belting gives out. Few plants keep any record of the actual length of service of the belts on any particular machine. At the end of a year's time it is not definitely known whether the belt equipment for the various kinds of machinery in the shop has cost more than it should or not. Factories generally will be interested in a plan of keeping shop records which is offered by the engineers of the New York Leather Belting Co., 51 Beekman street, New York. Charts have been printed which can be tacked up on every floor in a factory and, by merely filling in certain blanks, entailing little or no trouble, at the end of the year the exact record of belts on every machine on that floor can be absolutely checked up. In this age of cost-reduction systems, a system of "shop belt records" of this sort should be kept. The belt-record charts of the sort described may be had by applying to the company.

### TRADE LITERATURE.

#### Banner Betterness.

"Banner betterness" is a phrase applied to its products by the Banner Electric Co., Youngstown, O. This company manufactures the Banner Mazda incandescent lamps, and has issued an attractive pamphlet illustrating and describing them.

#### A Handshake.

Handshake No. 16, a publication issued every other month for the mutual benefit of the Genuine Bangor Slate Co., Easton, Pa., and its customers and friends, is now being distributed. This little magazine contains much information useful to those interested in roofing subjects, together with some humorous reading.

#### Radial Trailing Truck.

The American Locomotive Co., 39 Church St., New York, is distributing an illustrated pamphlet describing its latest construction of radial truck with outside bearings. This type of truck is particularly applicable to the 462, 262, 282 and other types of locomotives having two trailing wheels and more than four coupled driving wheels.

#### Cotton Chats for April.

Cotton Chats, a publication by the Draper Company, Hopedale, Mass., is being circulated for April. It is illustrated and presents views of the E model Northrop loom, Northrop side cam pillow tubing loom, model spooler, Moscrop single-thread yarn testing machine and other equipment manufactured by the Draper Company.

#### "A Better Cash Received System."

"A Better Cash Received System" is the title of a pamphlet issued by the Burroughs Adding Machine Co., general offices and factory, Detroit, Mich. This publication de-

scribes a method of recording and handling cash receipts, which is claimed to eliminate the necessity of journalizing such items. Necessary forms for the system are illustrated in the pamphlet, and testimonials from a number of users are presented.

#### Marine Boiler Works Co.'s Products.

An interesting catalogue illustrating and describing the products of the Marine Boiler Works Co., general office and plant 2339-2357 Front St., Toledo, O., is now being distributed. This company manufactures boilers of numerous types and other products, including marine and stationary boilers, pulp digesters, globe and cylindrical rotaries, water jackets, oil stills, agitators and condensers, steel converters, stacks, tanks, riveted pipe, etc.

#### The Hayward Buckets.

Combining economy and efficiency, it is claimed that the Hayward orange-peel and clamshell digging buckets work hard and live long. In all parts of the world these buckets have been put to severe tests in excavating and handling work, and have met the difficulties encountered in an easy and efficient manner. They are manufactured by the Hayward Company, 50 Church St., New York, and are illustrated and described on a folder which the company is distributing.

#### Troy Dump Boxes.

The Troy dump box is a removable or portable box for use on ordinary teaming or farm-wagon gears, and are convertible at reasonable expense into a very satisfactory dumping wagon for sand, gravel, stone, crushed stone, loose earth, clinders, etc. The box is made of hard maple, with No. 10 gauge steel, while the top edges are protected with iron against wear or abrasion by shovels. They are manufactured by the Troy Wagon Works Co., Troy, O., and are illustrated and described in a pamphlet which the company has issued.

#### Sturtevant Electric Forge Blower.

The Sturtevant electric forge blower is composed of a pressure fan of the multivane type, enclosed in a pressed steel plate casing, driven by a direct-connected electric motor built to operate from electric-lighting circuits. As an individual forge blower it is claimed to possess many advantages over larger blowers which are employed for several forges. It is manufactured by the B. F. Sturtevant Company, Hyde Park, Mass., and is illustrated and described in bulletin No. 177, which the company has issued.

#### Newton Bolt-Threading Machines.

Illustrating and describing Newton bolt-threading machines and multiplying automatic die heads is catalogue No. 46, issued by the Newton Machine Tool Works, 24th and Vine Sts., Philadelphia. Among the products illustrated are 2-inch double bolt-threading machines; 20-inch blade bar cold saw cutting-off machine, designed to operate inserted-tooth blades; 26-inch plain rotary planing machines; milling machines; duplex locomotive rod boring machines and other equipment.

#### Firebox and Tube Plates.

A catalogue issued by the William H. Wood Locomotive Fire Box and Tube Plate Co., Media, Pa., illustrates and describes a modern type of locomotive firebox and tube plates which this company manufactures. These products are claimed to involve new principles of manufacture, to be scientifically and practically correct, and to add strength in form with increased heating surface. They have been extensively employed, and the booklet contains numerous testimonials from users attesting their merits. H. A. Gillis of Fowler & Gillis, Home Life Bldg., Washington, D. C., is the Southern representative of the company.

#### Silent-Running Flexible Gearing.

Among improvements which have tended to an "increased production and decreased cost" is the general application of the motor drive. To obtain the best results it is claimed that positive transmission is required, and while direct gearing is often used, it is sometimes impossible on account of the necessity of fixed centers or other limitations. A chain which may be applied on any convenient center, and with noiseless action, high efficiency and ease of application, is the Morse silent-running high-speed chain. This product is manufactured by the Morse Chain Co., Ithaca, N. Y., and is illustrated and described in general bulletin No. 9 which the company has issued.

#### American Fence News.

The evolution of the farm fence might be made the subject of an interesting sketch—from the broken stones and small boulders

which cumbered the pasture or tillable field, the split-rail fence, hedges and other forms of fence, to the ornamental woven-wire fence in various designs and combinations, looking toward strength, utility and attractiveness. In the American Fence News for April much interesting information is presented as to the effectiveness of farm fencing, methods of erecting fences, operating a farm, ornamenting it, etc. This publication is issued by the American Steel & Wire Co., Chicago, New York and other cities, manufacturer of the American fence for farm and other purposes.

#### Gas Engines and Producer Plants.

Reliability and efficiency are important points to be considered in the design and construction of gas engines. Simple in design and correctly proportioned, all reciprocating parts should be properly balanced and not of excessive weight, while the bearing surfaces should be ample and all material entering into the engine construction should be the best obtainable and adapted to their respective uses. A gas engine which is claimed to fulfill these conditions is the product of the Trenton (N. J.) Malleable Iron Co., New York office, 50 Church St. This company manufactures gas engines, producer plants, direct-connected generators, pumps, etc., which are illustrated and described in a catalogue which the company has issued.

#### Simpson Concrete Porch Book.

The first Simpson molds for ornamental concrete work were designed and offered to cement users in 1905 by Joseph Simpson. In 1906 the Simpson Cement Mold Co., 152 East Spring St., Columbus, O., was incorporated, and since that time it has produced forms for molding many different blocks, with others always in preparation. These molds have been favorably introduced in this country and foreign countries, now being in use in about 1500 cement-block-making plants, from which thousands of Simpson porches have been constructed. They are claimed to be of the best quality of iron, fitted and finished with great accuracy, easily operated, strong, rigid and durable for an unlimited amount of work. The Simpson concrete porch book No. 2, issued by the company, illustrates and describes these molds and their method of operation, and also presents views of ornamental cement products made by them, together with photographs of porch and other work in which these products have been used.

#### The Chloride Accumulator.

Bulletin No. 121 issued by the Electric Storage Battery Co., general sales office and plant at Allegheny Ave. and 19th St., Philadelphia, illustrates and describes the installation of the "chloride accumulator" in the mills of the Indiana Steel Co. at Gary, Ind. This plant is one of the most extensive of its kind, and a brief description of it in the bulletin enables engineers to understand the character and extent of the load fluctuation on the power equipment. A storage-battery equipment was installed principally to minimize the fluctuations of the load on the generating station. This battery proper consists of two series of "chloride accumulator" cells, each series containing 125 cells. The capacity of each series is 4320 amperes at the one-hour rate, or 8640 amperes at the usual regulating rate, and the two series operating in parallel are capable of giving 17,280 amperes at double the hour rating at a voltage which may vary from 230 volts down to 200 volts, depending upon the state of charge of the battery and the duration of the discharge, etc. About 90 per cent. of the generating plant is A. C., and the storage-battery equipment is designed to take care of both A. C. and D. C. fluctuations.

#### Inland Sheet Steel.

Under the title "The Story of an Inland Galvanized Sheet" the Inland Steel Co. of Chicago has published a booklet which sets forth (both by illustration and description) in a clear and concise manner the details of manufacturing inland sheet steel. The reader is carried step by step from the mining of the iron ore in the Mesabi district, its transportation to the company's works at Indiana Harbor, Ind., the process of smelting the ore and the converting of the iron into steel by the basic open-hearth process. Having converted the ore into steel, the reader is then shown the processes followed in the blooming mill, cropping shear, sheet bar mill and sheet rolling mill, which produce the sheet steel in the rough. Then follows preparing the sheets for market, including trimming and squaring, cold rolling, annealing, pickling and galvanizing. To indicate the care which is taken in the manufacture of the company's product in order to keep it up to a high standard of uniformity, the various tests and inspections made as the material passes from one de-

partment to another are described, concluding with the final inspection given the plates before they are sent to the shipping-room. To users of sheet metal in any form this booklet cannot help but prove of great interest and profit, because it will enable them to secure a comprehensive idea of the various processes followed and the care exercised in the manufacture of inland sheet steel from the iron ore to the finished product. This booklet differs from the usual one describing the manufacture of various products in that the text is in no sense technical, but is written in a style that will be appreciated by the general user of sheet steel.

The Corrosion and Preservation of Iron and Steel. By Allerton S. Cushman and Henry A. Gardner. Publisher, McGraw-Hill Book Co., New York city. Price \$4 net.

The main purpose of this book is to elucidate the electrolytic theory of corrosion of iron and steel. In separate chapters are discussed the problem of corrosion, the theory of solutions, the theory of corrosion, the application of electrolytic theory, the inhibition and stimulation of corrosion, the technical protection of iron and steel, the relation of pigments to the corrosion of iron, recent field tests on protective coatings, paints for various purposes, testing and design of protective paints, the properties of pigments and of paint vehicles and the corrosion of water-jackets. A comprehensive bibliography is added to the volume, in which the authors have endeavored to include the results of all recent investigations and original researches touching on the subject up to the date of publication.

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,  
Baltimore, Md., May 4.

The Baltimore stock market was generally dull during the past week. In the trading United Railways common sold at 12½; do. trust certificates, 12½; do. incomes, 59½ to 58¾; do. funding 5s, 83¼ to 82¼, with last sale at 82¼; do. do. scrip, 83; United 4s, 86 to 85¾, with last sale at 85¾; Consolidated Gas, Electric Light & Power common, 53; do. preferred, 89 to 87, with last sale at 88; Consolidated Gas 6s, 100; do. 5s, 107½; do. 4½s, 91½; Seaboard Company common, 23½; Seaboard 4s, stamped, 84½ to 83¾; do. three-year 5s, 99½ to 99¼; do. 10-year 5s, 99¼; do. adjustment 5s, 71; Consolidated Cotton Duck, 6; do. preferred, 17; Mt. Vernon-Woodberry Cotton Duck 5s, 68 to 68½; G.-B.-S. Brewing 1sts, 40¼ to 40.

Bank stock sold as follows: Farmers and Merchants', 49; First National, 137¼ to 137; Mechanics', 28; Commerce, 31; Union, 121¼; Merchants', 178.

American Bonding sold from 78½ to 78; Baltimore Trust, 166; Maryland Casualty, 92¼ to 90; Mercantile Trust, 141.

Other securities were traded in thus: Atlantic Coast Line of Connecticut, 5-20s, 91; Atlantic Coast Line Consolidated 4s, 94; Baltimore City 3½s, 1980, 92½; do. do. 1930, 95; do. do. 1940, 95; do. do. 1928, 95½ to 95¼; do. 4s, 1926, W. L., 100½; Atlantic Coast Line Railroad, 126 to 124¼; Consolidation Coal, 113 to 109½; Macon, Dublin & Savannah 5s, 97¾; Baltimore, Sparrows Point & Chesapeake 4½s, 92; Baltimore Electric 5s, stamped, 88¾; Carolina Central 4s, 91½ to 90½; United States Steel, 82 to 80; Wilmington & Weldon 5s, 110½ to 110¼; Virginia Midland 2d, 100¼; Alabama Consolidated

Coal & Iron 5s, 81½; Fairmont & Clarksburg Traction preferred, 77¼; Detroit United, 4½s, 81¼; Fairmont Coal 1st 5s, 94½; Georgia & Alabama Consolidated 5s, 103¾ to 103½; Maryland Electric 5s, 97½ to 98; Norfolk Railway & Light 5s, 99; Central Railway construction 5s, 108; Fairmont & Clarksburg Traction 5s, 96; Western Maryland Railroad stock, 44¼; Maryland, Delaware & Virginia preferred, 14¼; Alabama Consolidated Coal & Iron common, 35; do. preferred, 67 to 70½; City & Suburban (Washington) 5s, 103¼ to 103½; Georgia, Carolina & Northern 5s, 105; Memphis Street Railway 5s, 99; Northern Central Railway stock, 129½ to 129; Charleston Consolidated Electric 5s, 93½; Northern Central 5sA, 111½; do. Baltimore City Passenger 4½s, 98½; do. 5s, 100¼; Coal & Iron Railway 5s, 101.

## SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended May 4, 1910.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	239	242
Charleston Consolidated	50	30	...
Fairmont & Clarksburg	100	23	...
Fairmont & Clarksburg Pfd.	100	77½	81
Georgia & Fla.	100	18½	19¼
Norfolk & Poria Trac. Com.	100	18½	19¼
Seaboard Company Common	100	22	...
Seaboard Company 1st Pfd.	100	70	...
Seaboard Company 2d Pfd.	100	43	45
United Rys. & Elec. Co.	50	12½	13
Western Maryland	100	44	...

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank	10	38	39
Drovers & Mech. Nat. Bank	100	23	...
Farmers & Mer. Nat. Bank	40	...	49
First National Bank	100	135	137½
Maryland National Bank	20	23	24
Mechanics' National Bank	100	...	178
National Bank of Baltimore	100	121¼	125
National Exchange Bank	100	155	...
National Howard Bank	10	13½	...
National Marine Bank	30	42	...
National Mechanics' Bank	10	26	28
National Union Bank of Md.	100	120¼	122½
Second National Bank	100	195	...
Western National Bank	20	...	38

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.	25	78	79
Fidelity & Deposit	50	144	150
Maryland Casualty	25	...	80
Maryland Trust	100	...	72½
Mercantile Trust & Deposit	50	140	144
U. S. Fidelity & Guaranty	100	137½	138

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron	100	30	35
Ala. Con. Coal & Iron Pfd.	100	70	71
Con. Cotton Duck Common	50	5	6
Con. Cotton Duck Pfd.	50	16½	19
Con. Gas, Elec. Lt. & P. Com.	100	57	65
Con. Gas, Elec. Lt. & P. Pfd.	100	87	89
Consolidation Coal	100	108	112
Georges Creek Coal	100	118	120

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast Line 1st 4s, 1932	94	94½	...
At. Coast Line Convert. Deb. 4s	100	100½	...
At. Coast Line Com. 4s, 1938	89½	89½	...
Atlan. Coast Line (Conn.) 5s, Clafs.	103	105	...
Balto. & Harrisburg 5s, 1936	104	...	...
Balto. & Harrisburg Ext. 5s, 1938	103	...	...
Carolina Central 4s, 1949	90	91½	...
Charleston & West. Car. 5s, 1946	104¼	105¼	...
Coal & Iron Railway 5s, 1920	104¼	105¼	...
Col. & Green. 1st 6s, 1916	107	108	...
Georgia & Alabama 5s, 1943	103¼	104	...
Georgia, Car. & North. 1st 5s, 1929	104½	105	...
Georgia Pacific 1st 6s, 1922	112	114	...
Georgia South. & Fla. 1st 5s, 1945	107	107½	...
Maryland & Penna. 4s, 1951	88	...	...
Macon, Dublin & Savannah 5s	...	98	...
Petersburg Class A 5s, 1926	107½	108	...
Piedmont & Cum. 1st 5s, 1911	99	...	...
Potomac Valley 1st 5s, 1941	105	...	...
Raleigh & Augusta 1st 6s, 1926	115	...	...
Raleigh & Gaston 5s	...	110½	...
Seaboard & Roanoke 5s, 1926	104	...	...
Silver Spgs., Ocala & G. 4s, 1918	...	97½	...
Southern Railway Con. 5s, 1994	104	...	...
Savannah, Fla. & West. 6s	...	125	...
Seaboard 4s, Stamped	...	83¾	83¾
Seaboard Air Line 5s, 10-year, 1911	99½	100	...
Seaboard Air Line 5s, 3-year	99½	99½	...
Seaboard & Roanoke 6s, 1916	100	...	...
Virginia Midland 2d 6s, 1911	100¾	101¼	...
Virginia Midland 3d 6s, 1916	107¼	108½	...
Virginia Midland 4th, 1921	104	110	...
Virginia Midland 5th 5s, 1926	105	...	...
Virginia Midland 6th 5s	107	108	...
Western Maryland 4s, 1952	84½	85½	...
Western N. C. Con. 6s, 1914	104	106	...
W.L. Col. & Aug. 6s, 1910	...	100¼	...
Wilmington & Weldon. Gold 5s, 1935	110	110½	...

Street Railway Bonds.	Par.	Bid.	Asked.
Atlanta Con. St. Ry. 5s	103½	104½	...
Augusta Ry. & Elec. 5s, 1940	...	101¾	...
Balto. City Pass. 5s, 1911	100	100½	...
Balto., Sp. Pt. & C. 4½s	91¾	92¾	...
Balto. Trac. 1st 5s, 1929	108	...	...
Balto. Trac. (N. B. Div. 5s), 1942	...	112	...
Central Ry. Con. 5s (Balto.), 1932	108	...	...
Charleston City Ry. 5s, 1923	101½	103	...
Charleston Con. Elec. 5s, 1999	92¼	94¼	...
City & Suburban 5s (Wash.), 1948	103	103¾	...
Fairmont & Clarksburg Trac. 5s	...	96	...
Knoxville Trac. 1st 5s, 1928	103	104	...
Lake Roland Elevated 5s, 1942	...	113	...
Lexington Ry. 1st 5s, 1949	90	...	...
Macon Ry. & Lt. 1st Con. 5s, 1953	...	95½	...
Maryland Electric Railways 5s	...	98	...
Memphis Street Railway 5s	...	98½	...
Norfolk & Portsmouth Trac. 5s	...	79	81
Norfolk Railway & Light 5s	...	93¾	99
Norfolk Street Railway 5s, 1944	104	105¼	...
United Railways 1st 4s, 1949	85¼	86	...
United Railways Inc. 4s, 1949	59	59¼	...
United Railways Fdg. 5s	...	82¼	83

[For Additional Financial News, See Pages 90 and 91.]



Established 1835  
**The Merchants National Bank**

South and Water Sts., BALTIMORE, MD.  
DOUGLAS H. THOMAS, President.  
WM. INGLE, Vice-President and Cashier.  
J. C. WANDS, Asst. Cashier.  
JOHN B. H. DUNN, Asst. Cashier.  
Capital, \$1,500,000  
Surplus and Profits, \$900,000  
Deposits, \$12,000,000  
Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

**JOHN NUVEEN & CO.**

1st Nat. Bank Bldg., CHICAGO  
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.  
Write us if you have bonds for sale.

**THE FIRST NATIONAL BANK**  
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United States Depository and Disbursing Agent.  
Capital - \$100,000  
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A general banking business transacted. Special attention given to collections.

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Fully Equipped Department for the Organization of Corporations under advice of Counsel, and for the Registration of Corporations as required by the Delaware Law.  
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The Delaware Corporation Law is Broad, Liberal, Safe and Stable. Granting and annual taxes low.

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Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

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With assets of nine million dollars, offers just the additional facilities required.

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Jno. M. Miller, Jr., Vice-Pres. and Cashier.

**Hugh MacRae & Co.**  
BANKERS

MISCELLANEOUS SOUTHERN SECURITIES  
COTTON MILL STOCKS  
WILMINGTON, N. C.  
NEW YORK CITY 149 Broadway

**Southern Steam**  
Railroad Securities

DEALT IN  
**F. J. LISMAN & CO.**  
Specialists in Steam R. R. Securities.  
Members New York Stock Exchange.  
30 Broad Street NEW YORK  
404 Connecticut Mutual Bldg., Hartford.  
Land Title & Trust Bldg., Philadelphia.

CROSS CREEK COAL COMPANY 6% Gold bonds, total issue \$250,000. All have been disposed of to investors and bankers in different parts of the country, including Saco, Maine; Boston, Mass.; Rochester, N. Y.; Westfield, Olean, Fredonia and Buffalo, N. Y.; Franklin, Coudersport, Pittsburgh, Smethport, Shamokin and Fort Allegany, Pa.; Columbus, Dayton and Springfield, Ohio; Northfork, Welch and Bluefield, W. Va.; Roanoke, Va.; Nashville, Knoxville, Jasper, Chattanooga and South Pittsburg, Tenn.; Atlanta, Ga.; Lowell, Mass.; East Orange, N. J., and Washington, D. C., until now there are but \$30,000 of them left. These bonds are first lien on 7000 acres of the best coal properties in Tennessee, and \$75,000 of this money is being spent on an up-to-date coal works with a capacity of about 1000 tons a day. Particulars will be furnished from the office, 1906 Mutual Life Building, Buffalo, N. Y. P. S.—A bonus of preferred stock will be given with the bonds.

**GEO. M. CLARK**  
Auditor and Public Accountant  
Room 315 James Building  
CHATTANOOGA, TENN.

**INVESTMENT**  
SECURITIES

Southern Stocks and Bonds  
Municipal and Corporation  
Cotton Mill Stock a Specialty  
WM. S. GLENN Broker - SPARTANBURG, S. C.

CAPITAL \$1,000,000

RESOURCES MORE THAN \$11,000,000

SURPLUS, \$2,500,000

**The Baltimore Trust Co.**  
BALTIMORE, MD.

Successor to the  
International Trust Company of Maryland  
and  
The Baltimore Trust and Guarantee Company

OFFICERS  
THOMAS H. BOWLES, President DOUGLAS H. GORDON, First V.-Pres.  
G. C. MORRISON, Second V.-Pres. SAMUEL C. ROWLAND, Third V.-Pres.  
C. D. FENHAGEN, Secretary-Treasurer  
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E. A. LEITCH, Resident Manager. Mutual Building, RICHMOND, VA.  
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Home Office, 100 Broadway, New York Branches in all Principal Cities

**The National Exchange Bank**  
OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.  
Capital, \$1,000,000  
July 15, 1908, Surplus and Profits, \$671,631.60  
OFFICERS:  
WALDO NEWCOMER, President.  
SUMNERFIELD BALDWIN, Vice-Pres.  
E. VICTOR LAWRENCE, Cashier.  
Wm. J. DELCHER, Asst. Cashier.  
C. G. MORGAN, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

**Bank of Richmond**

Capital and Surplus, \$1,500,000  
RICHMOND, VA.

JOHN SKELTON WILLIAMS, President.  
FRED'K E. NOLTING, 1st Vice-President.  
T. K. SANDS, 2d Vice-President and Cashier.  
H. A. WILLIAMS, Assistant Cashier.  
L. D. CRENSHAW, JR., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

We have sound and safe

**Southern**  
Investments

to offer

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Connections in the Principal Cities of Europe.

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Real estate loans and preparing abstract of titles a specialty.  
6% interest allowed on time deposits.  
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Assets Over \$5,000,000

Pioneer Surety Co. of the South.  
Becomes Surety on bonds of every description.

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**The Value of a Transmission Rope**

is measured by the amount of work you can get out of every dollar's worth—not by the first cost.

The essential requirements of a first-class driving rope are:

LONG LIFE

LITTLE STRETCH

THE LEAST AMOUNT OF  
ATTENTION WHEN IN-  
STALLED and GOOD  
RUNNING QUALITIES.

After years of study and experimenting with rope drives we have developed in our

**"American" Transmission Rope**

a driving rope that combines all these requisites. IT IS NOT the CHEAPEST rope in first cost. IT IS the MOST ECONOMICAL rope to buy, as it is made of the finest quality pure, selected long fibre manila laid up in our special lubricating compound. It requires no external dressing and is stretched in process of manufacture. You will find any slight difference in first cost soon balanced by the cost of dressing required by ropes not lubricated. Write us for samples and prices.

**The American Manufacturing Co.**

Largest Makers of Fibre in the World

63-65 Wall Street

New York City

**TRANSMISSION ROPE**



**Miscellaneous Bonds.**

Ala. Con. Coal & Iron 5s.....	82	85
Atlanta Gas 1st 5s, 1947.....	101	89
Baltimore Electric 5s, 1910.....	88	89
Consolidated Gas 5s, 1910.....	100	100 1/2
Consolidated Gas 5s, 1929.....	107	108 1/2
Consolidated Gas 4 1/2s.....	91	94 1/2
Con. Gas, Elec. Lt. & P. 4 1/2s.....	81	81 1/2
Fairmont Coal 1st 5s.....	94	95
G. B. S. Brewing 1st 4s.....	39 1/2	40 1/2
G. B. S. Brewing Inc. 5s.....	5	15
Maryland Steel Co. 5s.....	100	99
Maryland Telephone 5s.....	99	98 1/2
Mt. Vernon-Woodly's Cot. Duck 5s.....	68 1/2	68 1/2
United Elec. Lt. & P. 4 1/2s.....	90	93

**SOUTHERN COTTON-MILL STOCKS.**

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending May 2.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	75
Alken Mfg. Co. (S. C.).....	90	90
American Spinning Co. (S. C.).....	160	160
Anderson Cotton Mills (S. C.).....	53	55
Arcadia Mills (S. C.).....	98	98
Arkwright Cotton Mills (S. C.).....	100	103
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	116	116
Belton Mills (S. C.).....	137	137
Brandon Mills (S. C.).....	99	102
Cannon Mfg. Co. (N. C.).....	135	135
Cabarrus Cotton Mills (N. C.).....	130	135
Chadwick Mfg. Co. (N. C.) Pfd.....	100	100
Chiquola Mfg. Co. (S. C.).....	175	182
Clifton Mfg. Co. (S. C.).....	105	105
Clinton Cotton Mills (S. C.).....	120	130
Columbus Mfg. Co. (Ga.).....	93	98
Courtney Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (Ala.).....	99	99
Darlington Mfg. Co. (S. C.).....	85	92
D. E. Converse Co. (S. C.).....	100	100
Drayton Mills (S. C.).....	95	105
Eagle & Phenix Mills (Ga.).....	117	117
Enslay Cotton Mills (S. C.).....	175	185
Enoree Mfg. Co. (S. C.).....	57	60
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	300	300
Gaffney Mfg. Co. (S. C.).....	82	85
Gainesville Cotton Mills (Ga.).....	75	80
Glenwood Cotton Mills (S. C.).....	150	150
Gluck Mills (S. C.).....	98	101
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	114	117
Hartsville Cotton Mills (S. C.).....	175	175
Henrietta Mills (N. C.).....	160	175
Inman Mills (S. C.).....	104	108
King Mfg. Co. (S. C.).....	90	93
Lancaster Cotton Mills (S. C.).....	130	130
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	127
Laurens Mills (S. C.).....	127	127
Limestone Mills (S. C.).....	160	170
Lockhart Mills (S. C.).....	78	85
Lockhart Mills (S. C.) Pfd.....	99	100
Loray Cotton Mills (N. C.) Pfd.....	96	97 1/2
Marlboro Cotton Mills (S. C.).....	80	85
Mills Mfg. Co. (S. C.).....	102	102
Molton Mfg. Co. (S. C.).....	110	110
Monaghan Mills (S. C.).....	152	152
Monarch Cotton Mills (S. C.).....	105	107
Newberry Cotton Mills (S. C.).....	135	130
Ninety-six Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	125	130
Olympia Cotton Mills (S. C.).....	90	90
Orr Cotton Mills (S. C.).....	106	109
Pacolet Mfg. Co. (S. C.).....	101	101
Pacolet Mfg. Co. (S. C.) Pfd.....	99	102
Pelzer Mfg. Co. (S. C.).....	169	169
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co. (S. C.).....	170	180
Saxon Mills (S. C.).....	127	127
Sibley Mfg. Co. (Ga.).....	71	73
Spartan Mills (S. C.).....	135	140
Trion Mfg. Co. (S. C.).....	140	140
Tucapau Mills (S. C.).....	300	300
Union-Buffalo (S. C.) 1st Pfd.....	74	80
Union-Buffalo (S. C.) 2d Pfd.....	30	25
Victor Mfg. Co. (S. C.).....	154	154
Warren Mfg. Co. (S. C.).....	107	107
Warren Mfg. Co. (S. C.) Pfd.....	106	110
Washington Mills (Va.).....	20	20
Washington Mills (Va.) Pfd.....	122	122
Whitney Mfg. Co. (S. C.).....	135	135
Windsor Mills (N. C.).....	125	125
Woodruff Cotton Mills (S. C.).....	98	103
Woodside Cotton Mills (S. C.).....	98	103
Watts Mills (S. C.).....	90	95
Williamston Mills (S. C.).....	118	125

**To Finance New Developments.**

The Public Securities Co. of Chicago, which has been organized with authorized capital of \$20,000,000, proposes, among other things, to undertake the financing of gas, electric, traction, steam railway and timber properties and hydro-electric and irrigation projects after thorough investigation of any such enterprise which may be presented. The company owns and controls the firm of McCoy & Co., dealers in investment bonds, 181 La Salle street, Chicago, which will continue in business. Homer W. McCoy is president of the new company; Charles H. Deppe and Walter A. Graff, vice-presidents; Joseph H. Roy, secretary and treasurer. The advisory board includes several Southern men; for instance, A. G. Campbell of Natchez, Miss.; Lynn H. Dynkins of New Orleans; F. H. Fries of Winston-Salem, N. C.; W. S. Glenn of Spartanburg, S. C.; Caldwell Hardy of Norfolk, Va., and others.

**Arkansas Bankers.**

At the twentieth annual convention of the Arkansas Bankers' Association, held at

Fort Smith April 26 and 27, the following officers were elected for the ensuing year: George R. Wood of Van Buren, president; A. D. Foster of Pine Bluff, vice-president; Robert E. Wait of Little Rock, secretary, and F. M. Smith of De Queen, treasurer.

**FINANCIAL CORPORATIONS.**

Ala., Goshen.—The First National Bank of Goshen has been approved; capital \$25,000; organizers, J. I. Law, G. B. Howard, J. C. Wilson, R. E. L. Mount and J. A. Carroll.

Ark., Booneville.—The Citizens' Bank of Booneville is reported to have begun business; capital \$25,000. J. C. Cotner is president; Mrs. Mattie Edwards, vice-president; Charles X. Williams, cashier, and Omar Yarbrough, assistant cashier.

Ark., De Witt.—The Commercial Bank of De Witt, capital of \$30,000, has filed articles of incorporation. Business is expected to begin between June 1 and 15, with officers thus: J. W. Allen, president; L. A. Black, vice-president; J. M. Thompson, secretary and treasurer.

Ark., Pocahontas.—The People's Real Estate & Abstract Co., recently incorporated, has elected officers thus: H. L. Throgmorton, president; John F. James, vice-president and general manager; Dr. C. E. Stuttle, secretary and treasurer.

Fla., Gainesville.—The Florida Bank of Gainesville, capital \$75,000, is reported organized with directors thus: J. J. Haymans, president; R. D. Medlin, J. W. McDowell and C. A. Faircloth, vice-presidents; J. M. Fenell, cashier; J. R. Faircloth, M. H. De Land, C. Y. Crawford, B. D. Hartsfield, J. K. Christian, Dr. J. H. Hodges, H. D. Wood, C. D. Dennis, E. Lee Hughes, J. G. Dampier, E. L. Johnson, Dr. O. S. Clyatt, Phillip Miller, T. J. Cone and C. A. Colclough; F. B. Hartsfield is assistant cashier. Business is expected to begin about May 15.

Ga., Albany.—Official: The Georgia National Bank chartered; capital \$100,000; surplus \$10,000; F. F. Putney, president; J. E. Toole, cashier. This is a conversion of the Georgia Banking Co., which has a capital of \$50,000.

Ga., Atlanta.—Official: The American Bond & Mortgage Co. incorporated; capital \$1,000,000; surplus \$500,000; incorporators, John D. Walker, Sparta; D. W. James, Blakely; J. R. Mercer, Dawson; T. E. Gurr, Bainbridge, and Chas. P. Glover, Atlanta. Business is expected to begin within 60 days.

Ga., Elberton.—Official: The Elbert Land & Abstract Co. chartered; capital \$10,000; incorporators, W. D. Tutt, J. H. Blackwell, H. P. Hunter, S. W. Thornton and L. M. Heard. Business is to begin at once.

Ga., Stillmore.—Official: The Farmers' Exchange Bank incorporated; capital \$15,000. Business has begun with R. E. Graham president, E. H. Heath first vice-president, John Durden second vice-president and W. M. Warren cashier.

Ga., Sylvania.—Reported that city proposes to issue \$40,000 of electric-light, water-works and sewerage bonds.

Ky., Kirksey.—Official: The Kirksey Bank chartered; capital \$15,000; W. P. Dulaney, president and R. L. Williams, cashier. Business is to begin May 16.

La., Opelousas.—The Union Bank & Trust Co., capital \$100,000, is reported organized with directors thus: J. P. Sazan, president; Y. V. Andrespont, first vice-president, and Oscar Dardeau, second vice-president; Lionel Bienvenue, E. M. Bogni, Dr. G. Richard, Emar Andrespont, L. J. Dossmann, W. J. Sandoz, J. P. Boagni, Judge C. A. O'Neal and M. L. Swords. Business is expected to begin in December.

La., Thibodaux.—The Citizens' Bank of Lafourche has elected directors thus: E. N. Roth, president; W. E. Howell, Oieus Mire and Wilson Lepine, vice-presidents; H. L. Simma, cashier; L. E. Caillouet, Lovincy Rodrigue, John M. Webre, Charles A. Badaux, J. M. Keith, E. A. Beauvais, L. C. Roger, P. R. Percy, R. C. Seely and Walter Morvane; Elphege Clement is assistant cashier.

La., Mansfield.—The People's Bank is reported organized with \$55,000 capital.

Md., Chestertown.—The Third National Bank of Chestertown has been authorized to begin business; capital \$50,000; James A. Pearce, president; Hope H. Barroll, vice-president, and Wm. B. Copper, cashier.

Miss., Georgetown.—The Georgetown Bank, capital \$25,000, is reported organized with directors thus: I. N. Ellis of Hazlehurst, president; F. B. Catchings of Georgetown, vice-president; R. W. Millsaps, Z. D. Davis and W. J. Davis of Jackson, D. M. Miller

and S. Kemp of Hazlehurst, J. W. Ashley, C. A. Shumaker and H. C. Moran of Georgetown.

Mo., Eldon.—The Eldon Building and Loan Association is reported chartered with \$150,000 capital; incorporators, Robert S. Harvey, Charles G. Bullingham and Monroe E. Gumphrey.

Mo., Joplin.—The Joplin Bond & Stock Co., capital \$50,000, is reported incorporated by Lon Dietrick, Kansas City; W. B. Cline and G. B. Brewer of Joplin.

N. C., Bailey.—A new bank capitalized at \$10,000 is reported organized with F. C. Bissette as president.

N. C., Holly Springs.—The Bank of Holly Springs, authorized capital \$100,000, is reported chartered by H. W. Norris, J. R. Carver, C. H. Collins, G. H. Alford and B. W. Burt.

Okla., Duke.—The Farmers and Merchants' Bank of Duke has been authorized to begin business; capital \$10,000; W. B. Graves of Hollis, president; J. H. Burnett of Due, cashier, and L. W. Burnett of Looney, vice-president.

Okla., New Orleans.—The Magazine Market Building and Loan Association is reported to have filed articles of incorporation; capital \$50,000. Among the incorporators are A. J. O'Keefe, Edward C. Byrnes, Pierre D. Oliver and M. D. Connors.

Okla., Port.—George C. Whitehurst and J. A. Whitehurst of Sayre and Frank Mosier of Port are reported organizing a bank.

S. C., Clinton.—The Commercial Bank of Clinton, capital \$35,000, will, it is reported, begin business about September 15 with J. D. Bell president and H. D. Henry cashier; directors, Geo. W. Young, W. E. Bell, J. I. Copeland, L. H. Davidson, W. J. Henry, Jack H. Young and J. F. Bell of Renno.

S. C., Hartsville.—The Hartsville Building and Loan Association, capital \$50,000, with privilege of increasing to \$150,000, has elected officers thus: President, Wm. Eggleston; vice-president, T. E. Goodson; secretary and treasurer, C. M. McDonald; solicitor, F. A. Miller; directors, L. Vaughan, M. S. McKinnon, G. E. King, L. B. Stephenson, T. E. Goodson, L. F. Watford, C. W. Coker, L. W. Coker and Dr. Wm. Eggleston.

S. C., Pelion.—Reported that a bank is to be organized.

S. C., Sumter.—Official: The Consolidated Insurance Agency incorporated; capital \$10,000; incorporators, W. B. Upshur, Geo. D. Shue, Thos. Wilson, Neill O'Donnell, Isaac Schwartz, C. T. Mason, C. G. Rowland, L. D. Jennings and R. I. Manning. Business is to begin immediately.

S. C., Union.—The Citizens' National Bank has been authorized to begin business; capital \$50,000. F. R. Morgan is president and C. S. Sanders cashier. This is said to be a conversion of the Citizens' Savings Bank.

Tex., Center.—The State Guaranty Bank is reported chartered with \$25,000 capital by W. W. Lastinger, George F. Oliver, A. M. Jones and others.

Tex., Eustace.—Official: The First State Bank chartered; capital \$10,000. Directors: M. E. Edgar, president; G. J. Cook, vice-president, and F. C. Warren, cashier, all of Eustace, Tex.; F. M. Earnest, G. F. Weakes, J. M. Hussey and P. E. Miller of Athens, Tex.

Tex., Fort Stockton.—The First National Bank has been approved; capital \$25,000. Organizers: C. A. Brown of Alpine, Tex.; R. L. Neville, A. S. Sage and J. A. Sanford.

Va., Lexington.—The Farmers Deposit & Savings Bank incorporated; capital \$25,000 to \$50,000; B. E. Vaughan, president; J. D. H. Ross, vice-president, and W. C. Firebaugh, secretary and treasurer.

Va., Norton.—The National Bank of Norton, capital \$25,000, has elected directors thus: E. H. Ould, president; J. W. Litton, vice-president; L. H. Petree, cashier; directors, E. H. Ould, J. W. Litton, T. M. Cherry, H. M. Bandy and E. H. Kilgore.

**NEW SECURITIES.**

Ala., Anniston.—Official: An election is to be held May 23 to vote on \$60,000 of 5 per cent. 30-year school and funding bonds; denomination \$500. Bids for same will be received until 8 P. M. May 26. Address City Council; John S. Stump, City Clerk.

Ala., Decatur.—Bids will be received by H. A. Skeggs, Mayor, until May 17 for \$25,000 of 5 per cent. 30-year city hall, jail and fire department bonds.

Ala., Camden.—Reported that an election is to be held in Wilcox county May 2 to vote on \$150,000 of Wilcox road bonds.

Ala., Tuscaloosa.—Reported that an elec-

tion is to be held to vote on \$10,000 of additional school bonds.

Ala., Tuscaloosa.—An ordinance is to be prepared, it is stated, providing for \$10,000 of additional school bonds.

Ark., Lockesburg.—An official letter denies the report that bonds are to be issued.

Ark., Prairie Grove.—Reported voted: \$20,000 of school-building bonds.

Fla., Fort Pierce.—Official: The Atlantic National Bank of Jacksonville, Fla., and the Bank of Fort Pierce at Fort Pierce, Fla., purchased the \$200,000 of 5 per cent. St. Lucie county good-roads bonds; denomination \$1000; dated February 7, 1910.

Fla., Milton.—Voted: \$25,000 water-works, \$10,000 of electric-light and \$5000 of sewerage bonds. W. W. Clark is Mayor and W. J. Williams, Jr., City Clerk.

Fla., Tallahassee.—An official letter confirms the report that bids will be received until May 12 for \$30,000 of 5 per cent. 10-50-year judgment, funding and electric and water-works system improvement bonds; denomination \$1000; dated May 1, 1910. City Council has full and exclusive control of the matter.

Fla., West Palm Beach.—May 31 an election is to be held to vote on \$6000 of 6 per cent. 5-20-year bonds of Special Tax School District No. 5. Address J. Daugharty.

Ga., Cairo.—An election will be held May 2, it is stated, to vote on \$9000 of water-extension and \$6000 of electric-light-extension bonds.

Ga., Cusseta.—Reported that \$2500 of 6 per cent. 20-year school-building bonds have been voted, and bids for same will be received at any time.

Ga., Macon.—An official letter says that in August Bibb county will probably vote on the question of issuing bonds.

Ga., Union City.—Official: Voted: \$30,000 of 6 per cent. 10-30-year school building, street, water-works and electric-light bonds; denomination \$1000; dated May 1, 1910. As soon as bonds are validated bids will be asked. D. A. Carmichael is Mayor, and W. M. Rogers, City Clerk.

La., St. Martinsville.—Reported that \$20,000 of bonds for high school will be issued.

Md., Betterton.—Reported that bonds for street and sidewalk improvements have been voted.

Md., Frederick.—Bids will be received until May 23 for \$64,000 of 4 1/2 per cent. funding bonds. Address The Mayor.

Miss., Brooksville.—Bids will be received until 7 P. M. June 1 for \$7000 of 6 per cent. 20-year and \$2000 of 5 per cent. 18-year bonds. R. S. Jamison is Mayor and M. A. Parks Clerk.

Miss., Jackson.—Official: E. F. Noel, Governor, will receive bids until noon June 6 for \$600,000 of 20-year bonds for the purpose of defraying the expenses of the government of the State of Mississippi; interest not to exceed 4 per cent.

Miss., Pickens.—Regarding the report that \$5000 of school bonds had been voted, an official letter says: "There has been no action taken on the bond issue further than an informal election to ascertain the sentiment of the people."

Mo., Poplar Bluff.—Official: Bids will be received by I. H. Barnhill, County Treasurer, until May 19 for \$25,000 of 4 per cent. 10-20-year Butler county jail bonds; dated July 1, 1910.

Mo., Tipton.—The question of holding an election to vote bonds for electric-light plant is reported under consideration. Joseph Sommerhauser is City Clerk.

N. C., Edenton.—Official: Bids will be received until noon May 23 by W. J. Berryman, secretary Board of Drainage Commissioners, for \$25,000 of 6 per cent. Bear Swamp drainage district bonds.

N. C., Franklin.—Reported voted: \$20,000 of 6 per cent. 30-year water and sewer bonds.

N. C., Greensboro.—Official: Voted—\$25,000 of 5 per cent. 30-year school bonds; denomination \$1000. Bids will be asked as soon as possible. E. J. Stafford is Mayor.

N. C., Murphy.—Official: Bids will be received until May 16 for \$25,000 of water-works and sewerage bonds. Address Willard M. Axley, Secretary and Treasurer.

N. C., Statesville.—Official: Bids will be received until noon May 16 for \$50,000 of 5 per cent. 30-year Statesville township railroad-aids bonds; denomination, \$1000; dated January 1, 1910. Address D. M. Ausley, treasurer.

N. C., Sanford.—An official letter confirms the report that bids will be opened May 17 for \$25,000 of 4 1/2 per cent. 40-year sewerage bonds; denomination \$1000; dated June 1.



1910. Address J. D. Gunter, Sr., clerk. T. L. Chisholm is Mayor.

Okla., Cornish.—Bids will be received until 6 P. M. May 9 for \$5000 of 6 per cent. town-building bonds. Z. L. Boles is president board of trustees.

Okla., Broken Arrow.—Voted: \$37,000 of water-works bonds.

Okla., Francis.—Reported voted: Bonds for water-works; defeated, \$6000 of city hall bonds.

Okla., Frederick.—An official letter confirms the report that Dr. J. A. Gillis will receive bids until May 2 for \$25,000 of 5 per cent. 25-year school bonds; denomination \$1000; dated April 15.

Okla., Hobart.—C. H. Fawks, Clerk Kiowa county, is reported offering for sale \$17,500 of 6 per cent. drainage bonds.

Okla., Medford.—Reported that all bids received for the \$18,000 of electric-light plant and \$12,000 of water-works extension 6 per cent. bonds were rejected.

Okla., Lawton.—Voted: \$280,000 of sewer, water-works and dam bonds.

Okla., Woodward.—Reported that \$35,000 of high-school bonds have been voted.

Tenn., Memphis.—According to press dispatches, ordinances have been prepared providing for the issuing of \$200,000 of 4½ per cent. police-station bonds.

Tenn., Rogersville.—The Knoxville Banking & Trust Co. is reported to have purchased at \$435 premium \$40,000 of 5 per cent. Hawkins county pike bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$500,000 of 5 per cent. Galveston county road improvement bonds; \$21,956 of 5 per cent. 10-40-year Port Lavaca independent school district bonds; \$100,000 of 5 per cent. 10-40-year Jones county courthouse bonds; \$10,000 of 5 per cent. 10-35-year Elgin independent school district schoolhouse bonds; \$3000 of 5 per cent. 20-year Armstrong county common school district No. 7 schoolhouse bonds; \$1000 of 5 per cent. Jack county common school district No. 19 schoolhouse bonds; \$2000 of 5 per cent. 5-20-year Argo independent school district bonds.

Tex., Beeville.—Official: Voted: \$30,000 of 5 per cent. 10-20-year sewer bonds; denomination \$1000. Address John R. Bensley, Mayor.

Tex., Beeville.—Official: Voted—\$30,000 of 5 per cent. 10-40-year sewer bonds; denomination \$1000.

Tex., Belton.—Reported voted: \$10,000 of school-building bonds.

Tex., Byers.—Official. Voted: \$12,000 of 5 per cent. 40-year bonds for addition to school building. A. M. Hanna is secretary Board of Trustees of Byers School District.

Tex., Ennis.—Bids will be received by T. H. Collier, Mayor, until 2 P. M. May 3 for \$12,000 of 5 per cent. 10-40-year water bonds.

Tex., Fairland.—According to press dispatches, bonds for water-works extension and schools have been voted.

Tex., Fort Worth.—No sale was made April 28 of the \$250,000 of 5 per cent. Tarrant county levee bonds.

Tex., Gainesville.—Bids will be received until May 21 by C. R. Pearman, County Judge, for \$125,000 of 4 per cent. 10-40-year Cooke county courthouse bonds.

Tex., Galveston.—According to press dispatches, the State Board of Education has waived its option on \$500,000 of 5 per cent. Galveston county road-improvement bonds, and they will now be put on the market.

Tex., Maypearl.—Reported that an election is to be held June 4 to vote on \$25,000 of road bonds.

Tex., Paris.—Bids will be received until 7.30 P. M. May 9 by G. H. McCulston, Mayor, for \$60,000 of street improvement, \$30,000 of water-works extension and \$5000 of public school building 10-20-year bonds.

Tex., Pendleton.—Reported voted: \$10,000 of school bonds.

Tex., Plainview.—Reported that \$10,000 of city hall and fire-station bonds have been voted.

Tex., Ringgold.—Official: Voted: \$12,000 of 5 per cent. 40-year bonds of Ringgold School District 48; denomination \$1000. Date for opening bids not yet decided. R. J. Liston is secretary of School Board.

Tex., San Marcos.—June 4, it is stated, a special election is to be held to vote on \$20,000 of road bonds.

Tex., Sherman.—Bids will be received until 7.30 P. M. June 6 by B. C. Kreager, City Secretary, for \$12,000 of water-works and \$8000 of street improvement 4½ per cent. bonds.

Tex., Waxahachie.—June 4, it is reported, Precinct No. 3 will vote on \$300,000 of road bonds.

Va., Christiansburg.—Official: Bids will be received until noon May 31 for \$40,000 of 15-30-year water-works bonds; bidder to name rate of interest. Address Recorder of Town of Christiansburg. W. C. Flagg is Mayor.

Va., Denbigh.—Reported that an election is to be held in June to vote on \$5000 of Denbigh school district bonds.

Va., Eastville.—Bids will be received until noon May 16 for \$5000 of 5 per cent. 5-20-year town bonds. R. S. Trower, Sr., is town clerk.

Va., Luray.—The New Market & Sperryville Turnpike Co. contemplates issuing several thousand dollars' worth of bonds for improvements.

Va., Portsmouth.—The City Council has adopted an ordinance authorizing the issuing of \$125,000 of street improvement and \$30,000 of school bonds. John Howard Hall is chairman of the finance committee.

W. Va., Beckley.—May 17 an election is to be held to vote on bonds for high school.

W. Va., Fairmont.—An election is to be held May 21 to vote on \$75,000 of water-works bonds.

W. Va., Keyser.—Dispatches state that a special election is to be held May 10 to vote on \$40,000 of water-works improvement bonds.

W. Va., Keyser.—An official letter confirms the report that an election is to be held May 17 to vote on \$25,000 of 5 per cent. 11-23-year bonds for erecting additional school building; denomination \$500; date of opening bids not yet decided. Address J. W. Stayman.

At Christiansburg, Va., bids will be received until noon May 31 for \$40,000 of 15-30-year water-works bonds. Further particulars will be found in the advertising columns.

At Statesville, N. C., bids will be received until noon May 16 for \$50,000 of 5 per cent. 30-year Statesville township railroad-aid bonds. Further particulars will be found in the advertising columns.

At Edenton, N. C., bids will be received until noon May 28 for \$25,000 of 6 per cent. Bear Swamp drainage district bonds. Further particulars will be found in the advertising columns.

At Baltimore, Md., bids will be received until noon May 23 for \$2,400,000 of 4 per cent. city stock, as follows: \$500,000 of Annex improvement loan, \$500,000 of new engine-house loan, \$500,000 of new schoolhouse loan, \$350,000 of conduit loan and \$550,000 of burnt district improvement loan. Further particulars will be found in the advertising columns.

At Murphy, N. C., bids will be received until May 16 for \$25,000 of waterworks and sewerage bonds. Further particulars will be found in the advertising columns.

At Jackson, Miss., bids will be received until noon June 6 for \$600,000 of 20-year Mississippi State bonds; interest not to exceed 4 per cent. Further particulars will be found in the advertising columns.

#### FINANCIAL NOTES.

The Tennessee Bankers' Association will meet at Chattanooga May 24 and 25.

The Bank of Elizabethtown, N. C., is reported to have increased its capital from \$5000 to \$10,000.

The Mississippi Bankers' Association will hold its annual convention at Natchez, Miss., May 9 and 10.

The People's National Bank of Rock Hill, S. C., is reported to be doing business in its new building.

The Florida Bankers' Association will hold its annual meeting at Pensacola, Fla., May 6 and 7.

The American Trust Co. of Charlotte, N. C., will, according to press dispatches, on May 5 open a stock and bond department and a real estate department, both to be under the management of E. V. Patterson.

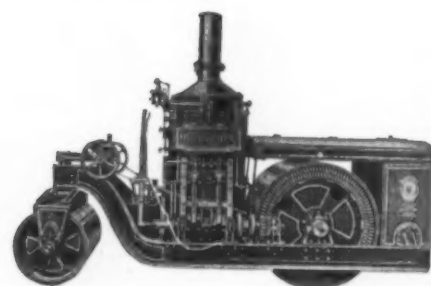
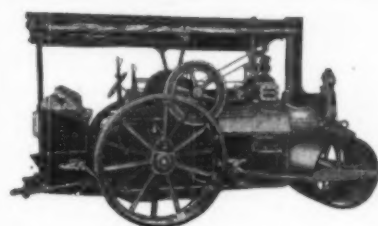
The annual meeting of the Georgia Bankers' Association will be held at Atlanta June 8 and 9.

The Morristown Bank & Trust Co. of Morristown, Tenn., will, it is reported, increase its capital from \$25,000 to \$50,000.

THE BOARD OF DIRECTORS of The American Cotton Oil Company on May 3, 1910, declared a semi-annual Dividend of Three per cent. upon the Preferred Stock, and a semi-annual Dividend of Two and one-half per cent. upon the Common Stock of the Company, both payable June 1, 1910, at the Banking House of Winslow, Lanier & Co., 59 Cedar Street, New York City. The Stock Transfer Books of the Company will be closed on May 16, 1910, at 3 P. M., and will remain closed until June 2, 1910, at 10 A. M.

JUSTUS E. RALPH, Secretary.

## THE IROQUOIS IRON WORKS STEAM ROLLERS



## THE AMERICAN STANDARD

FIFTEEN YEARS EXPERIENCE  
BUFFALO, N. Y.

## Don't Play with Fire

A COMMON caution to children, but also good for grown men and women. You are playing with fire when you insure your property without carefully selecting the company which promises to protect you against loss. Companies differ just like individuals. Why take chances when, at no extra cost, safety can be had by simply saying to your agent when your insurance expires, "Get me a policy in the Hartford."

The Hartford Fire Insurance Company is the best known of all the fire insurance companies in America. For a century it has promptly paid every loss, the aggregate now amounting to more than \$130,000,000. Its reputation for fairness is unexcelled. Its resources are never in danger from the hidden rocks of stock speculation, because invested only in the safest securities. One hundred years of life and growth have demonstrated its able management and unshaken stability. You are not playing with fire when you

#### ASK FOR THE HARTFORD

Any Agent or Broker can get you a Hartford Policy  
STATEMENT JANUARY 1st, 1910.



Capital,	\$ 2,000,000.00
Liabilities,	14,321,953.11
Assets,	23,035,700.61
Surplus for Policy-holders,	8,713,747.50



## ALPHABETICAL INDEX OF ADVERTISERS.

FOR "CLASSIFIED OPPORTUNITIES" See Pages 94-95-96

Ads. marked \* appear every other week. Ads. marked † appear in first issue of the month. Ads. marked ‡ not in this issue.

[illegible]



Triumph Electric Co.	149
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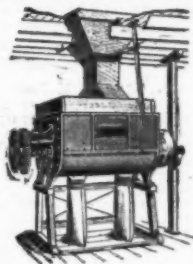
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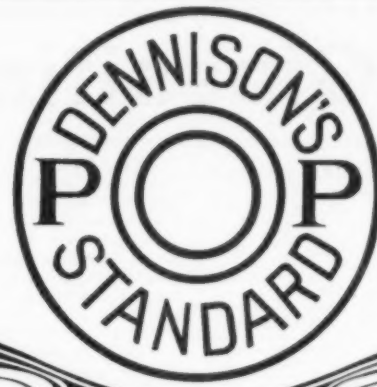
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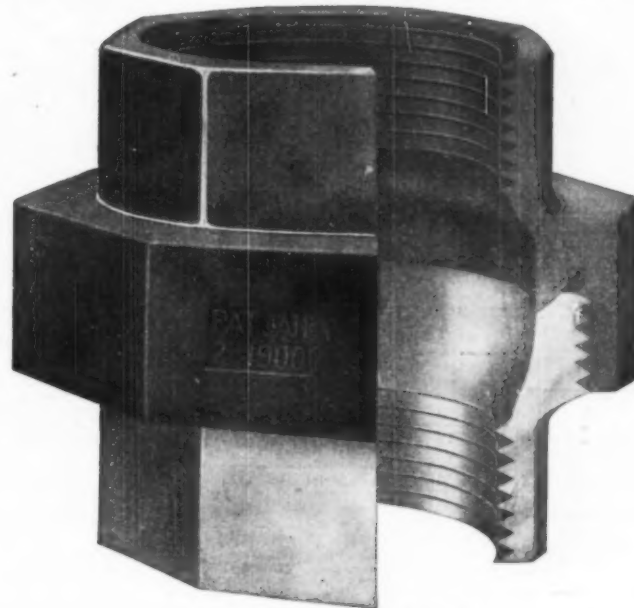
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# Classified Opportunities

## AGENTS AND SALESMEN WANTED

**SALESMAN.**—A traveling salesman for North Carolina, South Carolina, Georgia and Florida by one of the largest sheet-metal furnishing goods manufacturers in the East; must have experience with the line and in a part of this territory. Republic Metalware Co., 88 Warren St., New York.

**WANTED.**—A live excelsior salesman; must know all the markets for excelsior, wood-wool and excelsior pads; a desirable position for the right man. Address No. 618, care Manufacturers' Record.

**WANTED.**—Energetic man with knowledge of hydraulics to travel in the Southern States for an established water-wheel firm; man of middle age preferred. Address No. 606, care Manufacturers' Record.

**LIVE-WIRE SALESMEN** calling on manufacturers' trade; large profits; small samples; quick sales. Fairfax Refining Co., Cleveland, Ohio.

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**HEATING** and ventilating engineer desires association with contracting engineers; willing to invest; young man, 27; technical graduate; 7 years' experience with large heating and ventilating manufacturers, also steam engineering, machinist, erecting engineer, chief draftsman, salesman; Eastern location preferred. Address No. 619, care Manufacturers' Record.

**EXPERIENCED OFFICE MANAGER** and accountant desires change; best references. Address No. 614, care Manufacturers' Record.

**A MASTER MECHANIC** of skill and ability, 40 years old, married, and of temperate habits, desires a change. Address No. 623, care Manufacturers' Record.

**WANTED.**—Position as oil mill superintendent; have had 8 years experience at an average of 45 gallons per ton each year; can give best of reference. Address G. S. C., Box 76, Wadesboro, N. C.

## HELP WANTED

**SECRETARY** for manufacturing company, \$1500, in Houston; also bookkeeper lumber company, \$1200, and manager commissary, \$1200. Give age and experience. American Opportunity Co., Houston, Texas.

**WANTED.**—Architectural draughtsman and designer. Write, stating experience and salary wanted and how soon could report for duty. E. J. Wood, Archt., Clarksburg, W. Va.

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**OPPORTUNITY FOR CANNING PLANT.** The owner of a 4000-acre peach orchard in Georgia will erect and equip canning plant if he can obtain a satisfactory lessee who will contract to buy the product of the orchard. An abundant supply of other fruit, berries and vegetables can be secured in the immediate neighborhood. Refer to File 5531. M. V. Richards, Land and Industrial Agent, Southern Railway, 1300 Pennsylvania avenue, Washington, D. C.

**AN excellent opportunity** for one who wishes to manufacture some small article requiring the use of a well-equipped foundry and machine shop; will be leased or sold. Address Box 195, Wytheville, Va.

**WINDOW FASTENER.**—Unique patent window fastener; open to correspondence with parties desiring to purchase territory. Address J. W. Rykard, Abbeville, S. C.

**200 ACRES**, one mile of city limits of Gadsden; lays beautifully; will sell half interest in property to party who will furnish money to put same on the market; best subdivision proposition in the South. For information address J. L. Meeks, Gadsden, Ala.

**INVESTORS** come to Gadsden, Ala., the new steel center of the South; great opportunities. The North Alabama Real Estate Co., Gadsden, Ala.

**WANTED.**—Manufacturers' agents in all sections of the country to send us plans and specifications for estimates on slate and tile roofing, on a liberal commission arrangement. Address Kansas City Slate & Tile Roofing Co., 21st and Forest Ave., Kansas City, Mo.

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**GRAHAM, VA.**, offers desirable electric light and railway franchises water-works will be sold separately or with such franchises; population 5000. Write R. Kemp Morton.

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**RED MINERAL SPRINGS, MT. PLEASANT, TEXAS**, a delightful winter resort, boating, bathing and other outdoor amusements affording pleasant recreation. Red Mineral Springs water is especially valuable in cases of indigestion, stomach, kidney and bladder troubles; highly recommended by doctors and chemists; splendid hotel facilities. Red Mineral Springs Development Co., Mt. Pleasant, Texas.

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**NEW EXCHANGE HOTEL**, block of Union depot and postoffice, Waco, Texas; remodeled and refurbished; every provision for guests' comfort; best service. A. D. Adams, Prop'r.

## INDUSTRIES WANTED

### BRICK AND TILE FACTORY

**WANTED.**—Brick and tile factory to locate at Avant, Osage county, Oklahoma; immense body of finest shale, affording supply for generations; soft running water free from alkali or other injurious ingredients; greatest supply of natural gas in State at 4 cents per thousand cubic feet; good railroad facilities; free shale for three years, thereafter nominal royalty; free factory site; absolutely no cash bonus. This proposition is probably best in Southwest. Scott Braden & Co., Oklahoma City, Oklahoma.

### COTTON MILLS

**COLEMAN, TEXAS**, wants a cotton mill located there, and wants to get in correspondence with people who can put it in and do the work. We are located in the center of a fine cotton-producing country and have good railroad facilities for handling the raw material and finished product. This county was twelfth in the production of cotton in the State of Texas in 1908. We can control from this and adjoining counties 250,000 bales and can get 400,000 if we go after it. Call on or address Coleman Commercial Club, Coleman, Texas.

**ABILENE, TEXAS**, wants a cotton mill; inexhaustible supply of pure water; steam coal at \$1.50 per ton; splendid shipping facilities; near the geographical center of the State; one-quarter million bales of cotton produced within a radius of 45 miles of the city last year. Address Abilene 25,000 Club, Box 537.

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**ATLANTA, TEXAS, WANTS A GLASS FACTORY.**—We have an unlimited quantity of glass sand that analyzes over 99 per cent. silica; natural gas in any quantity at satisfactory price; salt and lime manufactured close by; plenty of timber and water and other material; free site, free sand 20 years, exemption from city taxation 10 years, free artesian water to the first factory; transportation and rates all right. Write for full particulars on this and other factory propositions. Great opportunities. Cass County Industrial League, Atlanta, Texas.

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**CANNING FACTORY.**—Fine opening for a canning, preserving and pickle factory for canning all kinds of vegetables, putting up pickles and making catsups of various kinds, in town of 4500 population, with three trunk lines of railway, surrounded by fine farming lands producing all kinds of vegetables and many kinds of fruits, especially figs and oranges. Nothing of the kind here at present. Address Ten Thousand Club, Bay City, Texas.

### CAN FACTORY

**WHY DON'T YOU** manufacture shipping cans in Houston, Texas? Great opportunity; large quantities shipped in for local consumption; one plant alone consumes 100 carloads annually; other consumers are six coffee-roasting plants, two wholesale preserving plants and two wholesale drug houses; truck and fruit growers also large consumers. The right time to get in is now. Write for information to Adolph Boldt, Secretary Houston Business League, Houston, Texas.

### STEAM LAUNDRY

**ITASCA, TEXAS**, a town of 3500 people, with a trade territory containing a population of 15,000, wants an up-to-date steam laundry with sufficient capacity to handle the business; country is peopled by prosperous, progressive people, who are strong believers in "home industry." Itasca has 150,000 cotton mill, 125,000 oil mill, roller mills, light plants, a large woman's college, will soon begin the erection of a \$35,000 high-school building, and has a great deal of money invested in churches. Address Board of Trade, Itasca, Texas.

### FURNITURE FACTORY

**FURNITURE FACTORY.**—Free site and liberal stock subscriptions for location of furniture factory of any kind. Abundance of raw material and unexcelled transportation facilities. Address Chas. R. Rowe, Secretary Lufkin Progressive League, Lufkin, Texas.

### MISCELLANEOUS

**FREE SITES** and concessions on taxes, water and fuel given to factories to locate in McAlester, Oklahoma, the manufacturing city of the Southwest; cotton, fire clay, brick shales, iron, limestone, lumber and many other raw materials. Ask the Commercial Club, McAlester, Oklahoma.

**AUSTIN, TEXAS**, offers special inducements to the manufacturer or commercial man seeking a profitable investment. The home seeker is given the best of attention and the most liberal values. Austin real estate is the most active of any in Texas. If you haven't time to come to Austin in person, write to Will L. Vining, the Secretary of the Austin Business League, who will give you all the information you want.

**VICTORIA, TEXAS**, head of navigation of Guadalupe River; center of cotton, corn, truck and citrus fruit growing district of South Texas; country rapidly developing; opportunities for many industries. If interested in the coastal section of Texas, write for booklet "D" to the Secretary of the Progressive League.

**NAVASOTA, TEXAS**, the town of great opportunities; railroads radiate in eight directions; sixteen passenger trains daily; six thousand population; navigation to deep water assured; ideal location for factories; abundance of raw material; we want a cotton mill, press-brick plant, packery, and furniture factory; great opportunities for investment in lands, town additions and various enterprises; investors earnestly solicited to personally investigate. They will meet with cordial co-operation. Address J. J. Felder of Business Men's Club, Navasota, Texas.

**FACTORIES WANTED.**—Special inducements for manufacturing plants, particularly small industries, using wood, cotton or iron raw materials; mild, healthful climate; cheap freights, fuel, labor and living expenses. We mean business and will do our part. Business League, Columbus, Miss.

**THE CITY OF FLORENCE, S. C.**, in the center of the great cotton and tobacco region of the Pee Dee section of South Carolina, has attractive propositions to offer for a brick-manufacturing plant, a carriage and wagon factory, a machine shop and foundry, lumber and woodworking plant; finest distributing point in the State, with unsurpassed railroad facilities; abundance of good brick clay. Such plant could control output in this the finest agricultural region in the Southeast. Correspondence solicited by the Florence Board of Trade.

**HOUSTON NEEDS** a flour mill; free site on the great Houston Ship Channel; also free site for a hardwood manufacturing plant; unlimited raw material at hand; water transportation and seventeen rail lines, and the distributing center for the entire Southwest. Write Adolph Boldt, Secretary Houston Business League, Houston, Texas.

**"TAMPA IS THE TOWN TO TIE TO."** Gateway to Gulf; nearest important American port to Panama canal; doubling population every four years; 100 per cent. city of South; big opportunities for investor, manufacturer, homeseeker; tourists' paradise. For literature address W. B. Powell, Secretary Board of Trade, Tampa, Fla.

**INDUSTRIAL LOCATIONS.**—A Tennessee town, well located on main line Southern Railway, at junction point, has openings at present for an ice plant, flour mill, a stove factory and other woodworking plants, with good supply of raw materials within easy distance. The town will co-operate with interested parties in the locations of plants. Refer to File 23,634. M. V. Richards, Land and Industrial Agent, 1300 Pennsylvania avenue, Washington, D. C.

**DENISON, TEXAS**, offers splendid opportunities for the manufacturer, investor and prospective settler, where coal, timber, oil and natural gas are to be had at exceptionally low figures. Denison is the general division point of the M., K. & T. Railway, with lines diverging in six different directions and mammoth shops. Labor, skilled and unskilled, plentiful. Excellent public and private school facilities. Oklahoma fields give extensive cheap fuel, and with natural inexhaustible supply of cheap water. Denison is the ideal factory location. Excellent transportation facilities furnished by five railroads. One-half cent to three cents per 1000 for water for factory purposes. Splendid location for all kinds of factories. Free sites furnished by the city. For further detailed information write to Roy M. Finley, Secretary Live Wires Association, Denison, Texas.

**MANUFACTURERS, INVESTORS AND PROSPECTORS** will find in Lawton, Oklahoma, an ideal field for investments; free sites for manufacturing establishments on trackage for meritorious industries; a center of remarkable growth; 12,000 population; only eight years old; best water supply in Oklahoma; natural gas; one million dollars being expended in public improvements; fine educational facilities; forty-five miles of uniform concrete sidewalks; five miles of natural Oklahoma rock asphalt paving; splendid railroad facilities; raw material at hand. For further detailed information address L. P. Arnold, Secretary Chamber of Commerce, Lawton, Oklahoma.

**FREE.**—Industrial review of Muskogee, Oklahoma. If you are looking for a safe, judicious investment, good location for business, information, you will appreciate this book. It's full of meat. A card will bring it. Write today, Muskogee Townsite Co., Muskogee, Okla.

**A GOOD LOCATION** for a hosiery mill, overall factory, iron foundry and similar enterprises; ample railroad facilities; inducements offered to the right parties. For information address the Stamford Commercial Club, Homer D. Wade, Secretary Stamford, Texas.

**QUANAH** wants a cotton mill, meat-packing plant, shoe factory; large amount of stock ready to be taken or bonus given for any of these enterprises; four railroads; immense distributing territory; city growing 25 per cent. annually. Chamber of Commerce, Quanah, Tex.

**MANUFACTURERS' OPPORTUNITY.**—Free sites; no taxes; cheap natural gas; cheap coal; abundant water supply; best transportation; good town; opportunities for manufacture of furniture, woodenware and novelties, glass, tile and pottery, overalls, iron and steel products, carriages, etc. Write Board of Trade, Grafton, W. Va.

**MANUFACTURING SITES FREE** in the progressive State of Oklahoma, in the town of Arkoma, adjoining Fort Smith, and connected by an electric railway. Water rates free. Shale, natural gas, brick material and pure water. 280 feet higher than Fort Smith. Manufacturers' paradise in the way of cheap materials. Water and railway transportation. Rich bottom lands of 2000 acres; could be cut up in 20, 30 and 40-acre farms for trucking. In center of the great coal beds of Arkansas and Oklahoma. Within a radius of 250 miles of 22 per cent. of the standing hardwoods of the United States. Town lots for sale. For further information write Hopkins & Murray, 800-903 First National Bank Building, Fort Smith, Arkansas.

**COME TO ASHLAND, KY.**—Best paved city in U. S.; on Ohio and Big Sandy rivers; five railroads. Ashland wants farmers and fruit growers, wholesale establishments, manufacturers; also pig-iron, steel, black and galvanized sheets, nails, wire products, leather, lumber, fire-brick, red brick and cement block manufactured here. Cheap coal and natural gas. Write Ashland Business Men's Association, Ashland, Ky.



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